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Post-processing: Minimum Match 0%
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Listing first 45 summaries
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ALIGNMENTS

B-cell maturation factor - human

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ultra-high-sulfur keratin 2 - mouse C;Species: Mus musculus (house mouse) C;Date: 31-Mar-1992 #sequence_revision C;Accession: A38660; B38346
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A:Map position: 16p13.1-16p13.1
A:Introns: 44/1; 93/1
C:Superfamily: human B-cell matu
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A; Residues: 4-184 <LA3>
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A; Molecule type: mRNA
A; Residues: 1-184 <LA2>
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A;Title: A new gene, BCM, on chromosome 16 is A;Reference number: S31208; MUID:93010984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: EMBL:Z29574; NID:g471244; PIDN:CAA82690.1; PID:g471245 R;Laabi, Y.; Gras, M.P.; Carbonnel, F.; Brouet, J.C.; Berger, R.; Larsen, (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-184 <LAA>
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A;Title: The BCMA gene, preferentially expressed during B lymphoid maturation, A;Reference number: S43486; MUID:94218235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N;Alternate names: BCM protein; BCMA protein; BEL protein
C;Species: Homo sapiens (man)
C;Date: 27-Jan-1995 #sequence_revision 27-Jan-1995 #text_change 21-Jul-2000
C;Accession: S43486; S31208; S36661
                                                                                                                RESULT
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RESULT 4
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ultra high-sulfur keratin 1 - human
ultra high-sulfur matrix protein
N;Alternate names: UHS keratin; ultra high-sulfur matrix protein
C;Speciqs: Homo sapiens (man)
C;Date: V2-Oct-1999 #sequence_revision 22-Oct-1999 #text_change (c;Accession: $18946; B36686)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ultra-high-sulfur keratin 1 - mouse (Species: Mus musculus (house mouse) C;Species: Mus musculus (house mouse) C;Date: 28-Jun-1991 #sequence_revision 28-Jun-1991 #text_change 24-Sep-1999 C;Accession: A38346 R;Wood, L.; Mills, M.; Hatzenbuhler, N.; Vogeli, G. J. Biol. Chem. 265, 21375-21380, 1990 A;Title: Serine-rich ultra high sulfur protein gene expression in murine hat A;Reference number: A38346; MUID:91065980 A;Accession: A38346; MUID:91065980 A;Atctus: preliminary
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A38346
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A;Residues: 1-230 <MOO>
A;Cross-references: GB:M37759; NID:g200961; PIDN:AAA40106.1;
C;Superfamily: ultra-high-sulfur keratin
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R; Wood, L.; Mills, M.; Hatzenbuhler, N.; Vogeli, G.
J. Biol. Chem. 265, 21375-21380, 1990
A; Title: Serine-rich ultra high sulfur protein gene expression
A; Reference number: A38346; MUID: 91065960
A; Accession: B38346
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A;Residues: 1-223 <WO2>
A;Cross-references: GB:M37760; NID:g200963; PIDN:AAA40107.1;
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A; Residues: 1-21, 'GGCGSGCGSCCSNCGGCGSSCCKPVCC', 22-40, 'GSS', 44-45, 'G', 47-48, 'S'
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                         22-Oct-1999 #text_change 22-Oct-1999
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C:Keywords: hair; tandem repeat
F:7-15/Region: Ser-rich nonapeptide repeat
F:59-68/Region: Gly-rich decapeptide repeat
F:69-78/Region: Gly-rich decapeptide repeat
F:79-88/Region: Gly-rich decapeptide repeat
F:79-88/Region: Cys-rich decapeptide repeat
F:79-70/Region: Cys-rich decapeptide repeat
F:79-11//Region: Cys-rich decapeptide repeat
F:118-126/Region: Ser-rich nonapeptide repeat
F:127-136/Region: Cys-rich decapeptide repeat
F:137-145/Region: Cys-rich decapeptide repeat
F:137-145/Region: Cys-rich decapeptide repeat
F:137-145/Region: Cys-rich decapeptide repeat
F:166-165/Region: Cys-rich decapeptide repeat
                                                                                                                                                                                                                                                       R;McNab, A.R.; Wood, L.; Theriault, N.; Gie
J. Invest. Dermatol. 92, 263-266, 1989
A;Title: An ultra-high sulfur keratin gene
A;Reference number: A45910; MUID:89140394
                                                                                                                                                                                                                                                                                                                                                                     ultra-high-sulfur keratin - mouse
C;Species: Mus musculus (house mouse)
C;Date: 03-Jun-1993 #sequence_revision
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A;Residues: 1-39,'Y',41-169 <MAC>
A;Cross-references: GB:X55293; NID:g34078; PIDN:CAA39005.1; PID:g34079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R;MacKinnon, P.J.; Powell, B.C.; Rogers, G. J. Cell Biol. 111, 2587-2600, 1990
A;Title: Structure and expression of genes A;Reference number: A36686; MUID:91115951
A;Accession: B36686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Drabent, B.; Doenecke, D. submitted to the EMBL Data Library, December 1991 A;Description: Nucleotide sequence of a Human high-sulphur keratin
                                                                                                                A;Cross-references: GB:M27685; NID:g341749; PIDN:AAA81560.1; PID:g1066818
C;Superfamily: ultra-high-sulfur keratin
                                                                                                                                                              A; Molecule type: DNA
A; Residues: 1-186 <MCN>
                                                                                                                                                                                                                               A; Reference number: A45910; A; Accession: A45910
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C:Superfamily: ultra-high-sulfur keratin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: mRNA
A; Residues: 1-169 < DRA>
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A; Accession: S18946
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                     Query Match
Best Local
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27; Conserv
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25; Conserv
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                     18.48;
Score 91.5; DB Pred. No. 0.24; 4; Mismatches
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                                                                                                                                                                                                                                                                                                                            N.; Gierman, T.; Vogeli,
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C:Species: Drosophila melanogaster
C:Date: 04-Mar-1993 #sequence_revision 18-Nov-1994 #text_change 31-Mar-2000
C:Accession: A4343
R:Roebroek, A.J.; Creemers, J.W.; Pauli, I.G.; Kurzik-Dumke, U.; Rentrop, M.; Gateff, E.
J. Biol. Chem. 267, 17208-17215, 1992
A:Title: Cloning and functional expression of Dfurin2, a subtilisin-like proprotein proc
A:Reference number: A43434
A:Reference number: A43434; MUID:92381036
A:Accession: A43434; MUID:92381036
A:Residues: 1-1680 <ROED
A:Rote: sequence extracted from NCBI backbone (NCBIN:111933, NCBIP:111934)
C:Genetics:
C:Genetics:
C:Genetics: FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyBase:FlyB
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C;Species: Rattus norvegicus (Norway rat)
C;Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 21-uu. ....
C;Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 21-uu. ....
C;Caccession: T13954
R;Nakayama, M; Nakajima, D; Nagase, T; Nomura, N; Seki, N; Ohara, O.
Genomics 51, 27-34, 1998
A;Title: Identification of high-molecular-weight proteins with multiple EGF-like motifs
A;Teference number: Z14126; MUID:98360089
A;Reference number: Z14126; MUID:98360089
A;Recession: T13954
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
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                                                                          CSQNEYFDSLLHACIPCOLRCSSNTPPLTCQ---RYC--CEYFDSLLH-----ACP---
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LRCSP----PTCDYCCFHSEYFDSLLHACPPA----TCQPYC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CSQNEYFDSLLHACIPCQL----RCSSNTPPLT----CQRYCCEY----FDSLLHACPC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  --CRPC-CQPF
CPDGYFENSRNRTCVPCEPNCAS-----CQDHPEYCTSCDH-HLVMHEHKCYSACPLDT 1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CSAGAPCDAVTGSCI-CPAGRWGPRCAQSCPPLTFGLNCSQICTCFNGASCDSVTGQC-- 1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HACPPATCQPY
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                                                                                                                                                                      31;
                                                                                                                                                                                                             Similarity
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                                                                                                                                                                      Consequative
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25.0%;
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29.4%;
                                                                                                                                                             12;
                                                                                                                                                             Score 87; DB
Pred. No. 2.9;
12; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LQACPPGLYGKNCQHSC
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                                                                                                                                                                                                                                                 DB 2;
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                                                                                                                                                                                                                                                 Length 1680;
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                                                                                                                                                         Gaps
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Gene 208, 123-129, 1998
A;Title: Structure and hair follicle-specific
A:Reference number: JC6547; MUID:98201605
                                                 Query Match
Best Local Similarity
"""+"hes 29; Conserv
В
                               Ş
                                                                                                                                                      C;Superfamily: keratin high-sulfur matrix protein IIIA
C;Keywords: hair
                                                                                                                                                                                                             C; Comment: This C; Genetics:
                                                                                                                                                                                                                                                                 A; Molecule type:
A; Residues: 1-18
                                                                                                                                                                                                                                                                                              A; Reference number: A; Accession: JC6547
                                                                                                                                                                                                                                                                                                                                                 R;Mitsui, S.; Ohuchi, A.; Adachi-Yamada, T.; Gene 208, 123-129, 1998
                                                                                                                                                                                                                                                                                                                                                                                 high sulfur protein B2E - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 05-Dec-1998 #sequence_revision 05
C;Accession: JC6547
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A;Residues: 1-1548 <NAK>
A;Residues: 1-1548 <NAK>
A;Cross-references: GB:D17583; NID:9407344; PIDN:BAA04507.1; PID:d1005033; C;Keywords: hydrolase; serine proteinase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     R:Nakagawa, T.; Murakami, K.; Nakayama, K. FEBS Lett. 327, 15-717, 193
A;Title: Telentification of an isoform with A;Reference number: S34583; MUID:93327934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C;Species: Mus musculus (house mouse)
C;Date: 02-Dec-1993 #sequence_revision
C;Accession: S34583
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                                                                                                                                                                                             A;Gene: b2E
                                                                                                                                                                                                                            A;Cross-references: DDBJ:AB003753; NID:g3046870; PIDN:BAA25573.1; PID:g3046871
C;Comment: This protein is a cysteine-rich, keratin associated protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Status: preliminary
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1212 QQCVLCHSSCRTCEGPHSMQCLSCRPGWFQLGKECLLQCRDGYYGESTSGRCEKCDKSCK 1271
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                                 1 CSQNEYFDSLLHACIP-----CQLRCSSNTPPLTCQ-
CSQSS------CCQPSCCQTSCCQPTCCQNS---SCQTSCCGTGSGQEGGSGATSCRVR 118
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SCRGPRPTDCQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----HACPCLRCSP-----PTCQYCCFHSEYFDSLLHACP-----
                                                                                                                                                                                                                                                             1-188 <MIT>
                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
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                                                                                  17.3%; 22.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17.48;
22.18;
                                                                   10;
                                                                Score 86; DB 2;
Pred. No. 0.73;
10; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 86.5;
Pred. No. 3;
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                                                                                                                                                                                                                                                                                                                                                                    Hotta, M.; Tsuboi, R.; Ogawa,
                                                                                                                                                                                                                                                                                                                                 expression
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                                                                   28;
                                                                                                    Length 188
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RESULT 11
$37649
$37649
high-sulfur keratin - human
C:Species: Homo sapiens (man)
C:Date: 13-Jan-1995 #sequence_revision 13-Jan-1995
C:Accession: $37649
R:Zhumabaeva, B.D.; Gening, L.V.; Gazaryan, K.G.
Mol. Biol. 26, 550-555, 1992
                                    Ş
                                                                                                                                                                                                        A; Molecule type: DNA
A; Residues: 1-175 <ZHU>
A; Cross-references: EMBL
C; Superfamily: keratin
                                                                                                                                                                                                                                                                                     A;Title: Cloning and structural characterization of A;Reference number: $37649
A;Accession: $37649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C:Date: 24-Apr-1984 #sequence_revision 24-Apr-C:Accession: A02840 R:Swart, L.S.; Haylett, T. Biochem. J. 133, 641-654, 1973 Biochem. J. 133, 641-654, 1973 A:Title: Studies on the high-sulphur proteins A:Reference number: A90269; MUID:74022242 A:Accession: A02840
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     keratin high-sulfur matrix protein IIIA3 - N;Alternate names: M2.6 protein C;Species: Ovis orientalis aries, Ovis ammo
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KRSHA3
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                                                                                                                                                                                                                                                                      A; Status: preliminary
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Matches 26
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                                                                                             CQLRCSSNTPPLTCQRYCCEYFDSLLHACPCLRCSPPTCQ--YCCF-HSEYFDSLLHACP 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CPCLRCSPPTCOY-----CCFHSEYFDSLLHACP---PATCQP 79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CSQNEYFDSLLHACIPCOLR----CSSNTPPLT------COR-YCCEYFDSLLHA 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EPSCSKPSC 183
            PSCCETSC
                                       PATCQPYC 81
                                                                      CQPSCCETS---CCQPSCCE-----TSC----CQPSCCQTSFCDFLASQLVDLQLSCCQ 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CRPITCCPTSCOAVVCRPCCWATTCCOPVSVQCPCCRPTSCOP 114
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                                                                                                                                  Conservative
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            79
                                                                                                                                                                                                          EMBL:x63338; NID:g311881; PIDN:CAA44938.1; PID:g311882
tin high-sulfur matrix protein IIIA
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25.28;
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                                                                                                                                                Score 83; DB 2; Pred. No. 1.3;
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                                                                                                                                                             Length 175
                                                                                                                                                                                                                                                                                                                   human hair sulfur-rich keratin
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nge 16-Aug-1996
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C;Accession: I46489; S49201
R;Powell, B.C.; Arthur, J.; Nesci, A.
Differentiation 58, 227-232, 1995
A;Title: Characterization of a gene encoding a
                                                                                hypothetical protein T22A3.8 - Caenorhabditis elegans (fragment) c;Species: Caenorhabditis elegans C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change C;Accession: T23064; T25096
                 A; Reference number: Z19669
                                                            C;Accession:
R;Barlow, K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: GB:U41636; NID:g1302629; PIDN:AAC52532.1; PID:g1302630 C;Comment: This enzyme is the first enzyme of the ubiquitin system directly and cell cycle progression, and in cytokine-induced cell proliferation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            R;Zhu, Y.; Carroll, M.; Papa, F.R.; Hochstrasser, M.; Ü'Andrea, A.D Proc. Natl. Acad. Sci. U.S.A. 93, 3275-3279, 1996
A;Title: DUB-1, a deubiquitinating enzyme with growth-suppressing ac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    N;Alternate names: DUB-1 protein
C;Species: Mus musculus (house mouse)
C;Date: 16-Apr-1997 #sequence_revision 09-May-1997 #text_change 05-Nov-1999
C;Accession: JC6133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Gene: KAP4L
C;Superfamily: ultra-high-sulfur keratin
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A; Reference number: A; Accession: T23064
                                                                                                                                                                                                                                                                                                                                                                                                                                                    C; Genetics:
A; Gene: dub
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A; Residues: 1-526 <ZHU>
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A; Residues: 1-126 < POW>
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Pred. No. 1.2;
6; Mismatches
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                                        October 1997
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A;Status: preliminary translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-2823 <WIL>
A;Cross-references: EMBL:AL008585; PIDN:CAA15432.1; GSPDB:GN00019; CESP:T22A3.8
A;Cross-references: EMBB:AL008585; PIDN:CAA15432.1; GSPDB:GN00019; CESP:T22A3.8
A;Cross-references: EMBL:Data Library, October 1996
A;Cross-reference number: Z.9980
A;Reference number: Z.9980
A;Cross-references: EMBL:Data Library, October 1996
A;Status: preliminary
A;Cross-references: EMBL:Data Library, October 1996
A;Cross-references: EMBL:Data Library, A;Cross-references: GB|Chr_I; PI
A;Accession: B87908
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-2823 <ST2>
A;Cross-references: GB|Chr_I; PI
C;Genetics:
A;Gene: T22A3.8
A;Map position: 1
C;Superfamily: laminin alpha-1 c protein T22A3.8 [imported] - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 10-May-2001 *sequence_revision 10-May-2001 #text_change 24-Aug-2001
C;Accession: F87908; E87908
R;anonymous, The C. elegans Sequencing Consortium.
Science 282, 2012-2018, 1998
A;Title: Genome sequence of the nematode C. elegans: a platform for investigating biolog
A;Title: Genome sequence of the nematode C. elegans: a platform for investigating biolog
A;Note: see websites genome.wustl.edu/gsc/C_elegans/ and www_sanger.ac.uk/Projects/C_ele
A;Note: published errafa appeared in Science 283, 35, 1999; Science 283, 2103, 1999; and Q 밁 밁 δÃ A;Accession: F87908
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-2823 <STO> B. 8 밁 δ Query Match Best Local S Matches 26 Query Match
Best Local Similarity
Matches 26; Conser 921 873 921 SCESCKEH-HWGNAOLHTCKPCGCHTQGAVNPQC 953 873 CSDGFFEDPLTGKCIEC -- TCNGNIDPMGIGNC-----54 TCQYCCFHSEYFQSLLHACPPATC----QPYC 54 1 CSQNEYFDSLLHACIPCQLRCSSNTPPL---TCQRYCCEYFDSLLHACPCLRC----SPP 53 CSDGFFEDPLTGKCIEC -- TCNGNIDPMGIGNC-----CSQNEYFDSLLHACIPCQLRCSSNTPPL---TCQRYCCEYFDSLLHACPCLRC----SPP 53 TCQYCCFHSEYFDSLLHACPPATC-----QPYC SCESCKEH-HWGNAQLHTCKPCGCHTQGAVNPQC 953 Similarity Conservative Conservative alpha-1 chain; laminin G 16.3%; Score 81; DB 27.7%; Pred. No. 14; tive 10; Mismatches 16.3%; Score 81; DB 27.7%; Pred. No. 14; PIDN:CAA15432.1; PID:g3924779; GSPDB:GN00019; CESP:T22A3 PIDN:CAB03385.1; PID:g3924881; GSPDB:GN00019; 10; PIDN:CAA15432.1; GSPDB:GN00019; CESP:T22A3.8 Mismatches 81 81 2; repeat homology; laminin-type 2; Length 2823, 32; -DS--ETGKCLKCIGHTTGD 920 DS--ETGKCLKCIGHTTGD 920 Length 2823 Indels Indels Gaps Gaps CESP: T22A3 7; 7; 2760/2 EGF-like EGF-like

Search completed: May 15, 2002, 09:49:35 Job time: 75 sec

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Result
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Maximum
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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KRUB_HUMAN
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KRUB_HUMAN
FUR2_DROME
PCK5_MOUSE
KRA3_SREEP
UBPW_MOUSE
LAG3_HUMAN
PAC4_RAT
LMB2_HUMAN
YNC3_PAC1
KRA3_CAPHI
SP11_HUMAN
YRC7_BOMMO
PCK5_BRACL
KRA3_CAPHI
SP11_HUMAN
YRC3_BOMMO
CK5_BRACL
KRA3_HUMAN
YRC3_HUMAN
YRC3_HUMAN
CBP_MOUSE
LMG3_HUMAN
CBP_HUMAN
CABP_HUMAN
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SP1_MOUSE
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EMBL; 229574; CAA82690.1; -.
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01-AUG-1992 (Rel. 2
01-AUG-1992 (Rel. 2
16-OCT-2001 (Rel. 4
                                        TISSUE-Follicle;
MEDLINE-91115951; PubMed-1703541;
McKinnon P.J., Powell B.C., Rogers G.E.;
"Structure and expression of genes for a class of proteins of the cuticle layers of differentiating
                                                                                                                                                                                                             Homo sapiens (Human)
Eukaryota; Metazoa; (
Mammalia; Eutheria;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             use by non-profit institutions as long modified and this statement is not removed. entitles requires a license agreement (See or send an email to license@isb-sib.ch).
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Nature 404:995-999(2000).
        follicles.";
J. Cell Biol
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TISSUE SPECIFICITY: EXPRESSED IN MATURE B-CELLS.
DISEASE: A FORM OF T-CELL ACUTE LYMHOBLASTIC LEUKEMIA (T-ALL)
CHARACTERIZED BY A CHROMOSOMAL TRANSLOCATION T(4;16)(Q26;P13)
WHICH INVOLVES BCMA AND IL2.
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the Euro
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"Genomic organization and promoter characterization of two human UH keratin genes."; keratin genes."; Gene 227:137-148(1999).

-i- FUNCTION: THE KERATIN PRODUCTS OF MAMMALIAN EPIDERMAL DERIVATIV SUCH AS WOOL AND HAIR CONSIST OF MICROFIBRILS EMBEDDED IN A RIG SUCH AS WOOL AND HAIR CONSIST OF MICROFIBRILS INCLUDE THE HIGH-MATRIX OF OTHER PROTEINS. THE MATRIX PROTEINS INCLUDE THE HIGH-SULFUR AND HIGH-TYROSINE KERATINS, HAVING MOLECULAR WEIGHTS OF
                                                                                                                                                                Eukaryota; Metazoa;
Mammalia; Eutheria;
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HSSP;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIMILARITY: BELONGS TO THE UHS KERATIN FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FUNCTION: THE KERÁTIN PRODUCTS OF MAMMALIAN EPIDERMAL DERIVATIVE SUCH AS WOOL AND HAIR CONSIST OF MICROFIBRIS EMBEDDED IN A RIGHMATRIX OF OTHER PROTEINS. THE MATRIX PROTEINS INCLUDE THE HIGH-SULFUR AND HIGH-TYROSINE KERATINS, HAVING MOLECULAR WEIGHTS OF 6-20 KDa, WHEREAS THE MICROFIBRILS CONTAIN THE LARGER, LOW-SULFU KERATINS (40-56 KDa).
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J., Gerst C., Bernard B.A., Egly J
tion and promoter characterization
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MEDLINE-92381036; PubMed-1512259;

RA Roebroek A.J.M., Creemers J.W.M., Pauli I.G.L., Kurzik-Dumke U.,

RA Rentrop M., Gateff E.A.F., Leunissen J.A.M., van de Ven W.J.;

RT "Cloning and functional expression of Dfurin2, a subtilisin-like

RT proprotein processing enzyme of Drosophila melanogaster with multiple

Trepeats of a cystbine motif.";

LJ. Biol. Chem. 26;17208-17215(1992).

C. -!- FUNCTION: FURIN IS LIKELY TO KEPRESENT THE UBIQUITOUS ENDOPROTEAS

ACTIVITY WITHIN CONSTITUTIVE SECRETORY PATHWAYS AND CAPABLE OF

C. CLEAVAGE AT THE RX(K/R)R COMSENSUS MOTIF (BY SMILARITY).

-!- CATALYTIC ACTIVITY: Release of mature proteins from their

proproteins by cleavage of Arg-Xaa-Yaa-Arg-1-Zaa bonds, where Xaa

complement component C3 and von Willebrand factor from their

respective precursors.

SIMILARITY: BELONGS TO PEPTIDASE PARTY.
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss institute of Bioinformatics and the EMBL outstation the European Bioinformatics institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way
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CLRCSPPTCQYC -- CFHSEYF -- DSLLHACPPA--

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DEVELOPMENTAL EXPRESSION.
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MEDLINE-96293359; PubMed-8698813;
Constam D.B., Calfon M., Robertson E.J.;
"SPC4, SPC6, and the novel protease SPC7"
"SPC4, SPC6, and the novel protease SPC7"
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01-FEB-1995 (Rel. :
16-OCT-2001 (Rel. :
16-OCT-2001 (Rel. :
Rancourt S.L., Rancourt D.E.;

**Rancourt S.L., Rancourt D.E.;

**Rancourt S.L., Rancourt D.E.;

**Murrine subtilisin-like proteinase SPC6 is expressed during embryon implantation, somitogenesis, and skeletal formation.*;

Dev. Genet. 21:75-81(1997).

-I- FUNCTION: LIKELY TO REPRESENT A WIDESPREAD ENDOPROTEASE ACTIVITY WITHIN THE CONSTITUTIVE AND REGULATED SECRETORY PARHWAY. CAPABLE, OF CLEAVAGE AT THE RX(K/R)R CONSENSUS MOTIF. MAY BE RESPONSIBLE FOR THE MATURATION OF GASTROINTESTINAL PEPTIDES. MAY BE INVOLVED IN THE CELLULAR PROLIFERATION OF ADRENAT. COMMON.
                                                                                                                                                                                                                                                                                           "Identification and functional expression of a new member of the mammalian Kex2-like processing endoprotease family: its striking structural similarity to PACE4.";
J. Blochem. 113:132-135(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
16-OCT-2001 (Rel. 40, Last annotation update)
Proprotein convertase subtilisin/kexin type 5 precursor (EC 3.4 (Proprotein convertase PC5) (Subtilisin/kexin-like protease PC5)
(Convertase PC5) (PC6) (Subtilisin-like proprotein convertase 6)
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MEDLINE=93327934; PubMed=8335106;
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Mammalla; Eutheria;
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MEDLINE-93342056;
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"Identification of an isoform with an extremely
of PC6, a Kex2-like processing endoprotease.";
FEBS Lett. 327:165-171(1993).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nakayama K.;
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                                                                                                                                                                                           Biol.
                                                                                                                                                                                                                                                                                                                                                 Marcinkiewicz M., Malide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ., Hosaka M.,
                                                                                                                                                                                         proteins at distin 134:181-191(1996).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cortex;
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ka M., Torii S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PubMed-8341687;
                                                                                                                                                                                                                                                                                                                                                                                                         Sci. U.S.A. 90:6691-6695(1993).
                                                                                                                                                                                                                                                                                                                                                                PubMed-8947550
                                                                                                                                                                                                                                                                                                                                                                             AND SUBCELLULAR LOCATION
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Rodentia;
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Sciurognathi; Muridae;
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during embryogenesis.";
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; Murinae; Mus
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the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AND PC5A/SHORT; ARE PRODUCED BY ALTERNATIVE SPLICING.

-i- TISSUE SPECIFICITY: PC5A IS EXPRESSED IN MOST TISSUES BY IS MOST ABUNDANT IN THE INTESTINE AND ADRENALS. PC5B IS EXPRESSED IN THE INTESTINE, ADD EACH AND ADRENALS. PC5B IS EXPRESSED IN THE INTESTINE, AND LUNG BUT NOT IN THE BRAIN.

-i- DEVELOPMENTAL STAGE: WEAKLY EXPRESSED THROUGHOUT THE EMBRYO, EXCEPT IN THE DEVELOPING NERVOUS SYSTEM, THE RIBS AND THE LIVER, BUT MARKEDLY UPREGULATED AT DISCRETE SITES DURING DEVELOPMENT. AT E6.5, PROMINENT EXPRESSION OBSERVED IN DIFFERENCIATED DECIDUA. AT E7.5, INTENSE EXPRESSION OBSERVED IN DIFFERENCIATED DECIDUA. AT E7.5, INTENSE EXPRESSION OBSERVED IN SOUTIES AND YOLK SAC FOLLOWED BY A CONFINATION TO DERMAMYOTOME COMPARTMENT. BETWEEN E9.5 AND E11.5, ABUNDANT EXPRESSION IN SONTIES AND YOLK SAC FOLLOWED BY A CONFINATION TO DERMAMYOTOME COMPARTMENT. BETWEEN E9.5 AND E11.5, ABUNDANT EXPRESSION IN THE LIMBS IS CONFINED TO THE CONDENSING MESENCHYM SURROUNDING THE CARTILAGE. AT THIS STAGE, STRONG EXPRESSION ALSO DETECTED IN VERTEBRAL AND FACIAL CARTILAGE PRIMORDIA AND IN THE MUSCLE OF THE TONGUE. AT E16.5, ABUNDANT EXPRESSION IN EPITHELIAL CELLS OF THE INTESTINAL VILLI. ISOFORM A IS MOST ABUNDANT AT ALL STAGES BUT SIGNIFICANT LEVELS OF ISOFORM B OCCUR AT E12.5.

-I- DOMAIN: THE PROPERTIDE DOMAIN ACTS AS AN INTRAMOLECULAR CHAPERONE ASSISTING THE FOLDING OF THE ZYMOGEN WITHIN THE ENDOPLASMIC
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DOMAIN: AC 1 AND AC 2 (CLUSTERS OF SORTING INFORMATION. AC 1 DIRECTS T WITH THE TGN SORTING PROTEIN PACS-1 SIMILARITY: BELONGS TO PEPTIDASE FA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SIMILARITY: CONTAINS 1 HOMO B/P DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAN BE ANY AMINO ACID AND YAA IS ARG OR LYS.
SUBCELLULAR LOCATION: PC5A IS SECRETED THROUGH THE REGULATED SECRETORY PATHMAY. PC5B IS A TYPE I MEMBRANE PROTEIN LOCALIZ A PARANUCLEAR POST-GOLGI NETWORK COMPARTMENT IN COMMUNICATIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SUBTILASE FAMILY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROPROTEINS
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TGN LOCALIZATION AND
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/E SPLICING.
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InterPro; IPR000561; EGF-1ike.
InterPro; IPR002174; Furin-like.
InterPro; IPR002184; P_domain.
InterPro; IPR002289; Peptidase_S8.
Pfam; PF01483; P; 1.
Pfam; PF00082; Peptidase_S8; 1.
Pfam; PF00082; Peptidase_S8; 1.
PRINTS; PR00723; SUBTILISIN.
PRODOM; PD000717; P_domain; 1.
SMART; SM00181; EGF_1ike; 2.
SMART; SM00001; EGF_1ike; 2.
SMART; SM000161; FU; 22.
                                                                                                                                                                                                                                                                                                                                                                                       EMBL; D17583; BAA04507.1
EMBL; D12619; BAA02143.1
EMBL; D14932; AAA74636.1
PIR; JX0248; JX0248.
PIR; A48225; A48225.
HSSP; Q99405; IMPT.
MEROPS; S08.076; -.
   PROPEP
CHAIN
                                                                                                              PROSITE; PS00136;
PROSITE; PS00137;
PROSITE; PS00138;
                                       SIGNAL
                                                        Transmembrane
                                                                          Cleavage on
                                                                                             Hydrolase; Serine
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PS00137;
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; BAA02143.1; -.
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r of basic re
                                                                        ; SUBTILASE_ASP; 1.
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e protease; Glycoprotein; 2
of basic residues; Repeat;
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     PROPROTEIN
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t; Alternative
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                                                                 Ovis aries (Sheep).
Eukaryota; Metazoa;
Mammalia; Eutheria;
Bovidae; Caprinae
NCBI_TaxID=9940;
                                                                                                             P02441;
21-JUL-1986 (Rel. (
21-JUL-1986 (Rel. (
01-AUG-1991 (Rel.)
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CARBOHYD
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MEDLINE=74022242; PubMed=4584026; Swart L.S., Haylett T.; "Studies on the high-sulphur proteins acid sequence of protein SCMKB-3A3."; Biochem. J. 133:641-654(1973).

-!- FUNCTION: THE KERATIN PRODUCTS OF SUCH AS WOOL AND HAIR CONSIST OF N
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DOMAIN
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DOMAIN
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ity 22.18;
servative
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AA; 209287
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                                                                                                             01, Created)
01, Last sequence update)
19, Last annotation updat
                                                                                                                                                                                                                                                                                                                                         ; Cetartiodactyla; Ruminantia;
Ovis.
                                                                                        Chordata; Craniata; Vertebrata; Euteleostomi;
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AC 2.

CLEAVAGE (AUTO-) (BY S CELL ATTACHMENT SITE ( CHARGE RELAY SYSTEM (B CHARGE RELAY SYSTEM (B CHARGE RELAY SYSTEM (B CHARGE RELAY SYSTEM (B CHARGE GLCNAC . .)

N-LINKED (GLCNAC . .)
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CYTOPLASMIC
CATALYTIC.
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ATEESWAEGGFCMLVKKNNLCQRKVLQQLCCKTCTFQG
(IN ISOFORM PC5A).
MISSING (IN ISOFORM PC5A).
MW; EC850EZDF20EA1C3 CRC64;
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EXTRACELLULAR (POTENTIAL).
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GELCNAC...)
  MICROFIBRILS
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        MAMMALIAN
                               of
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        EPIDERMAL
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  EMBEDDED
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Best Local
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   Pfam; PF00443; UCH-1; 1.

Pfam; PF00443; UCH-2; 1.

PROSITE; PS00973; UCH_2_1; 1.

PROSITE; PS00973; UCH_2_2; 1.

PROSITE; PS50235; UCH_2_3; 1.

PROSITE; PS50235; UCH_2_3; 1.

Ubiquitin conjugation; Hydrolase; The ACT_SITE 60 60 BY SIMI
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01-NOV-1997
01-NOV-1997
01-MAR-2002
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or send a
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SEQUENCE
                                                                                                                                                                                                                                                             This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the Entre the European Bioinformatics Institute. There are no restuse by non-profit institutions as long as its content modified and this statement is not removed. Usage by an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
01-NOV-1997 (Rel. 35, Last sequence update)
01-MAR-2002 (Rel. 41, Last annotation update)
Ubiquitin carboxyl-terminal hydrolase DUB-1 (EC 3.1
thiolesterase DUB-1) (Ubiquitin-specific processing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus (Mouse
Eukaryota) Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -i- MISCELLANEOUS: TI
PIR; A02840; KRSHA3.
InterPro; IPR002494;
                                                                                                                                                         MGD;
                                                                                                                                                                                          EMBL; U41636; AAC52532.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Proc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "DUB-1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=96194957;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (Deubiquitinating DUB1 OR DUB-1.
                                                                                                                                    InterPro; IPR001394; UCH-2.
                                                                                                                                                                         MEROPS;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   45
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CSQNEYFDSLLHACIPCQLR---CSSNTPPLT-------CQR-YCCEYFDSLLHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Y., Carroll M., Papa F.R., Hochstrasser M., D'Andrea / B-1, a deubiquitinating enzyme with growth-suppressing c. Natl. Acad. Sci. U.S.A. 93:3275-3279(1996).
FUNCTION: HAS GROWTH-SUPPRESSING ACTIVITY, INDUCES ARI PHASE UPON CONTROLLED EXPRESSION.
                                                                                                                                                                                                                                                                                                                                                                           ubiquitin + a thiol.
INDUCTION: BY INTERLEUKIN-3.
SIMILARITY: BELONGS TO PEPTIDASE FAMILY C19; ALSO FAMILY 2 OF UBIQUITIN CARBOXYL-TERMINAL HYDROLASES
                                                                                                                                                                                                                                                                                                                                                                                                                                      CATALYTIC ACTIVITY: Obiquitin ubiquitin + a thiol.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MATRIX OF OTHER PROTEINS. THE MATRIX PROTEINS INCLUDE THE HIGH-
SULFUR AND HIGH-TYROSINE KERATINS, HAVING MOLECULAR WEIGHTS OF
6-20 kDa, WHEREAS THE MICROFIBRILS CONTAIN THE LARGER, LOW-SULF
KERATINS (40-56 kDa).
MISCELLANEOUS: THE SOURCE OF THIS PROTEIN IS MERINO WOOL.
                                                                                                                                                         MGI:107699; Dub1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CRPITCCPTSCQAVVCRPCCWATTCCQPVSVQCPCCRPTSCQP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PF01500; Keratin_B2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26;
                                                                                                                                                                         C19.
                                                                                                                                                                                                                             s requires a license agreement (See an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PubMed=8622927;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      enzyme
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Rodentia;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PCCCRPVSCQTVSRPVTFVPRCTRPICEPCRRPVCCDPCSLQEGC
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25.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Craniata; Vertebrata; I Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRT;
SIMILARITY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8C0B56C0070B1C50 CRC64;
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0.082;
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                         Multigene family
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; Murinae; Mus
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Coutstation -
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Best Local Similarity 35.
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                     J. Cell Biol. 145:605-618(1999).

J. Cell Biol. 145:605-618(1999).

IF THORTION: BINDING TO CELLS VIA A HIGH AFFINITY RECEPTOR, LAMININ IS THOUGHT TO MEDIATE THE ATTACHMENT, MIGRATION, & ORGANIZATION CELLS INTO TISSUES DURING EMBRYONIC DEVELOPMENT BY INTERACTING WITH OTHER EXTRACELLULAR MATRIX COMPONENTS.

IS SUBUNIT: LAMININ IS A COMPLEX GLYCOPROTEIN, CONSISTING OF THREE DIFFERENT POLYPEPTIDE CHAINS (ALPHA, BETA, GAMMA), WHICH ARE BOUN TO EACH OTHER BY DISULFIDE BONDS INTO A CROSS-SHAPED MOLECULE COMPRISING ONE LONG & THREE SHORT ARMS WITH GLOBULES AT EACH END.

THE GAMMA-3 CHAIN IS A SUBUNIT OF LAMININ-12.

ITSSUE SPECIFICITY: Broadly expressed in: skin, heart, lung, and
                         Pfam;
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ACT_SITE
SEQUENCE
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                                                                InterPro;
                                                                                                                                          or send an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Characterization and expression of the laminin non-basement membrane-associated, laminin chain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Burgeson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM
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Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-MAR-2002 (Rel. 41,
01-MAR-2002 (Rel. 41,
01-MAR-2002 (Rel. 41,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q9Y6N6;
                                                   InterPro;
                                                                             InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Koch M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=99242614; PubMed=10225960;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID-9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (Human)
Eukaryota; Metazoa; (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Laminin gamma-3
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                                                                                                                                                                                                                                       THE ALPHA-HELICAL DOMAINS I AND II DOMAIN: THE ALPHA-HELICAL DOMAINS I AND II WITH OTHER LAMININ CHAINS TO FORM A COILED DOMAIN: DOMAIN IV IS GLOBULAR.

SIMILARITY: CONTAINS 1 LAMININ EGF-LIKE D SIMILARITY: CONTAINS 1 LAMININ DOMAIN IV.
                                                                                                                                                                                       European
                                                                                                                                      SWISS-PROT entry is copyright. It is produced through een the Swiss Institute of Bioinformatics and the EMBUropean Bioinformatics Institute. There are no restr by non-profit institutions as long as its content fied and this statement is not removed. Usage by and thes requires a license agreement (See http://www.isb-send an email to license@isb-sib.ch).
                                                                                         604349;
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IPR000561;
IPR000034;
IPR002049;
IPR001886;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R.E., Champliaud M.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OLSON
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                                                                                                             AAD36991.1;
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Primates; (
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307
59073
                                                  Laminin_B.
Laminin_EGF.
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                                                                            EGF-like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Created)
Last sequence update)
Last annotation update)
precursor (Laminin 12 g
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89
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Pred. No. 0.33
8; Mismatches
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Вү
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SIMILARITY.
263AA7B7579694EA
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0.33;
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                                                                                                                                                                                                                                                                                     ARE THOUGHT TO COIL STRUCTURE.
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                                                                                                                                                                                                                                                                                                      THOUGHT TO INTERACT
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                                                                                                                                                                                                                                                                (DOMAIN VI)
                                                                                                                                                                                        ne EMBL outstation restrictions on in
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                                                                                                             RESULT
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Best Local S
Matches 22
      Q63415;
Q63415;
Q1-NOV-1997 (Rel. 35, Created)
Q1-NOV-1997 (Rel. 35, Last sequence update)
Q1-NOV-1997 (Rel. 35, Last annotation update)
Q1-NOV-1997 (Rel. 40, Last annotation update)
Paired basic amino acid cleaving enzyme 4 precursor (EC 3.4.21.-)
(Subtilisin/kexin-like protease PACE4) (Subtilisin-like proprotein convertase 4) (SPC4).
                                                                                                                                                                                                                                                                                     CARBOHYD
CARBOHYD
CARBOHYD
CARBOHYD
CARBOHYD
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ProDom;
ProDom;
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DOMAIN
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DOMAIN
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CHAIN
DOMAIN
DOMAIN
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Eukaryota;
Mammalia;
                                                                                             PAC4_RAT
                                                                                                                                                                                                                                                                                                                                                                                                          DOMAIN
DOMAIN
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SMART; SM00136; LamNT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SMART; SM00180; EGF_Lam;
SMART; SM00001; EGF_like;
                                                                                                                                                                                                                                                    SEQUENCE
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                                                                                                                                        377
                                                                                                                                                                         322
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                                                                                                                                                                                         12 HACIPCQLRCSSNTPPLTCQRYCCEYFDSLLHACPCLRC----SPPTCQYCCFHSEYFDS
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                                                                                                                                                       LLHACPPATCQ
                                                                                                                                       RM-PCQPCDCQ 386
                                                                                                                                                                         HECLPC -- NCSGRSEECTFDR---
                                                                                                                                                                                                         ch 16.3%;
l Similarity 31.0%;
22; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EGF-like domain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PR00011; EGFLAMININ
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PS01248;
Eutheria;
                                                                                                                                                                                                                                                    1014
1071
1200
1424
1059
1059
1059
295
295
328
631
837
980
1185
1518
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                                                                                              STANDARD;
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; Laminin_B;
EGF_Lam; 10.
EGF_like; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EGF_1; 7.
EGF_2; 2.
LAMININ_TYPE_EGF; 10
                                                                                                                                                                                                                                                            980
1185
1518
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270
326
429
479
489
672
706
754
809
865
916
916
1013
11587
Chordata;
Rodentia;
                                                                                                                                                                                                                                                    172051
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cell
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DOMAIN II AND I.

COLLED COLL (POTENTIAL).

N-LINKED (GLCNAC...) (POTENTIAL).
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                                                                                                                                                                                                         Score 81; DB
Pred. No. 1.1;
8; Mismatches
                                                                                                                                                                                                                                                          N-LINKED
N-LINKED
N-LINKED
N-LINKED
N-LINKED
N-LINKED
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LAMININ
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LAMININ
                                                                                                                                                                                                                                                                                                                                                                                                                                  LAMININ
LAMININ
                                                                                                                                                                                                                                                                                                                                                                                                                                                          LAMININ N-TERMINAL (DOMAIN VI).
LAMININ EGF-LIKE 1.
LAMININ EGF-LIKE 2.
LAMININ EGF-LIKE 3.
LAMININ EGF-LIKE 4.
LAMININ EGF-LIKE 5 (N-TERMINAL).
                                                                                                                                                                         ELFRSTGHGGRCHHCRDHTAGPHCERCQENFYHWDP 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                    LAMININ
Craniata; Vertebrata;
Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                           LAMININ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             adhesion; Repeat;
                                                                                              PRT;
                                                                                                                                                                                                                                                    3CB6E09B5F203319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Extracellular matrix; Coiled coil;
                                                                                                                                                                                                                                                                                                                                                                                               N DOMAIN IV.
N EGF-LIKE 5 (
N EGF-LIKE 7.
N EGF-LIKE 8.
N EGF-LIKE 9.
N EGF-LIKE 9.
                                                                                                                                                                                                                                                            GAMMA-3
                                                                                              937
                                                                                                                                                                                                                  DB
1.1;
                                                                                                                                                                                                                         1:
                                                                                                                                                                                                          31;
                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                           (C-TERMINAL).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Signal.
                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                    CRC64;
                                                                                                                                                                                                                                                                   (POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
(POTENTIAL).
Euteleostomi;
; Murinae; Rat
                                                                                                                                                                                                                                                                                                                               (POTENTIAL)
                                                                                                                                                                                                                                                             (POTENTIAL)
                                                                                                                                                                                                          10;
Rattus
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Query Match
Best Local S
Matches 30
                                                                           ACT_SITE
ACT_SITE
ACT_SITE
CARBOHYD
CARBOHYD
CARBOHYD
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pfam; PF00082; Peptidase_S8; 1.
pRINTS; PR00723; SUBTILISIN.
proDom; PD000717; P_domain; 1.
smart; sm00181; EGF; 1.
smart; Sm00261; FU; 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Johnson R.C., Daklington D.N., Hand T.A., Bloomquist B.T., Mains R.E., PACE4: a subtilisin-like endoprotease prevalent in the anterior pituitary and regulated by thyroid status."; Endocrinology 135:1178-1185(1994).

-i- FUNCTION: LIKELY TO REPRESENT AN ENDOPROTEASE ACTIVITY WITHIN THE
                                                                                                                                                      SITE
                                                                                                                                                                  SITE
                                                                                                                                                                                           DOMAIN
DOMAIN
                                                                                                                                                                                                                                CHAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HSSP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       modified and this
                                                                                                                                                                                                                                                          SIGNAL
                                                                                                                                                                                                                                                                    Cleavage
                                                                                                                                                                                                                                                                                            PROSITE; PS00137; PROSITE; PS00138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or send an email
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This SWISS-PROT
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[1]
                                                                                                                                                                               DOMAIN
                                                                                                                                                                                                                                              PROPER
                                                                                                                                                                                                                                                                                 Hydrolase;
                                                                                                                                                                                                                                                                                                                      PROSITE; PS001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEROPS;
                                                                                                                                                                                                                                                                                                                                                                                                            InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                          InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro;
 Local Similarity 24. hes 30; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CONSTITUTIVE SECRETORY DATHWAY, WITH UNIQUE RESTRICTED
DISTRIBUTION IN BOTH NEUROENDOCRINE AND NON-NEUROENDOCRINE TISSUES
AND CAPABLE DE CLEAVAGE AT THE RX(K/R)R CONSUNSUS MOTIF.
CATALYTIC ACTIVITY: RELEASE OF ANTURE PROTEINS FROM THEIR
PROPROTEINS BY CLEAVAGE OF ARG-XAA-YAA-ARG-1-ZAA BONDS,
WHERE XAA CAN BE ANY AMINO ACID AND YAA IS ARG OR LYS.
CORACTOR: PROBABLY CALCIUM-DEPENDENT (BY SIMILARITY).
TISSUE SPECIFICITY: HIGH EXPRESSION IN THE ANTERIOR PITUITARY AND
IN SEVERAL BRAIN REGIONS, THE ATRIUM, AND THE VENTRICLE.
DOMAIN: THE PROPEPTIDE DOMAIN ACTS AS AN INTRAMOLECULAR CHAPERONE
ASSISTING THE FOLDING OF THE ZYMOGEN WITHIN THE ENDOPLASMIC
RETICULUM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             s SWISS-PROT entry is copyright. It is produced through a collaboration ween the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIMILARITY:
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SUBTILASE FAMILY
                                                                                                                                                                                                                                                                                                                                                                                                                                                             L31894; AAA61987.1;
Q99405; IMPT.
S; S08.075; -.
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IPR000209;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   IPR000
                                                                                                                                                                                                                                                                                   Serine
                                                               680
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186
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401
240
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882
900
937 i
                                                                                                                                                                                                                                                                   pair
                                                                                                                                                                                                                               46
133
                                                                                                                                                                                                                                                                 6; SUBTILASE_ASP; 1.
7; SUBTILASE_HIS; 1.
8; SUBTILASE_SER; 1.
8; SUBTILASE_SER; 1.
ne protease; Glycoprotein; Zy
r of basic residues; Repeat.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CONTAINS 1 HOMO B/P DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BELONGS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AWLEY; TISSUE=Hypothalamus, and Pituitary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PubMed=807036
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615
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132
937
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Furin-like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     institutions as long
           16.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                          P_domain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TO PEPTIDASE FAMILY S8;
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                                                                          CELL ATTACHMENT SITE (
CHARGE RELAY SYSTEM (B
CHARGE RELAY SYSTEM (B
CHARGE RELAY SYSTEM (B
N-LINKED (GLONAC...)
N-LINKED (GLONAC...)
  9
          Score 80.5; DB 1;
Pred. No. 0.75;
                                                                                                                                                                HOMO B.

CYS-RICH MOTIF (CRM)

CLEAVAGE (AUTO-).
                                                                                                                                                                                                       CATALYTIC
                                                                                                                                                                                                                              PAIRED
                                                                                                                                                                                                                                                        POTENTIAL.
 Mismatches
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                                                                                                                                                                                                                               BASIC
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                                                                                                                                                                                                                                                                                Zymogen;
                                                                                                                                                                                                                               AMINO
  39,
                                                                                                                                                                                                                               ACID CLEAVING ENZYME
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                                                                                                               TE (POTENTIAL).

(BY SIMILARITY).

(BY SIMILARITY).

(BY SIMILARITY).
                       Length 937;
                                                                                                                                                                              REGION
                                                                                                                                                                                                                                                                               Signal; Calcium;
                                                                           ) (POTENTIAL).
) (POTENTIAL).
 45;
Gaps
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LMB2_HUMAN
                                                                                                                                                                                     A TECH LIBRES AND CHANNES MAD IN THE BASEMENT MEMBER SPINE.

ABINI BIOL 14:489-497(1995).

C :- FUNCTION: BINDING TO CELLS UTA A HIGH AFFINITY RECEPTOR, LAMININ IS TO CELLS INTO TISSUES DURING EMBRYONIC DEVELOPMENT BY INTERACTING OF CELLS INTO TISSUES DURING EMBRYONIC DEVELOPMENT BY INTERACTING WITH OTHER EXTRACELLULAR MATRIX COMPONENTS.

C :- SUBUNIT: LAMININ IS A COMPLEX GLYCOPPOENT, CONSISTING OF THREE DIFFERENT POLYPEPTIDE CHAINS (ALPHA, BETA, GAMMA), WHICH ARE BOUND TO EACH OTHER BY DISULFIDE BONDS INTO A CROSS-SHAPED MOLECULE COMPRISING ONE LONG & THREE SHORT ARMS WITH GLOBULES AT EACH END.

THE BETA -2 CHAIN IS A SUBUNIT OF LAMININ.

C :- SUBCELLULAR LOCATION: EXTRACELLULAR.

C :- SUBCELLULAR LOCATION: EXTRACELLULAR.

C :- SUBCELLULAR LOCATION: EXTRACELLULAR.

C :- SUBCELLULAR LOCATION IN THE BASEMENT MEMBRANES (MAJOR COMPONENT). S-LAMININ IS CONCENTRATED IN THE SYNAPTIC COMPONENT). S-LAMININ IS CONCENTRATED IN THE SYNAPTIC COMPONENT). S-LAMININ CHAINS I AND II ARE THOUGHT TO INTERACT WITH OTHER LAMININ CHAINS TO FORM A COILED COIL STRUCTURE.

C :- SUBLICATIVE: COUNTAINS I LAMININ BGF-LIKE DOMAIN VI).

C :- SIMILARITY: CONTAINS I LAMININ DOMAIN IV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LMB2_HUMAN STANDARD; PRT; 1798 AA P55268; Q16321; 01-0CT-1996 (Rel. 34, Created) 01-0CT-1996 (Rel. 34, Last sequence update) 01-MAR-2002 (Rel. 41, Last annotation updat Laminin beta-2 chain precursor (S-laminin)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=95213013; PubMed=7698745; Wewer U.M., Gerecke D.R., Durkin M.E., Kurtz K.S., Mattei M.-G., Wewer U.M., Gerecke D.R., Durkin M.E., Burgeson R.E., Albrechtsen R.; "Human beta 2 chain of laminin (formerly S chain): cDNA cloning, chromosomal localization, and expression in carcinomas."; Genomics 24:243-252(1994).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "The human laminin beta 2 chain (S-laminin): structure, expression fetal tissues and chromosomal assignment of the LAMB2 gene.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Iivanainen A., Vuolteenaho R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=95316263; PubMed=7795887;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LAMB2 OR LAMS
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Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sainio K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           otation update)
  (S-laminin) (Laminin Bls chain).
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CAA92279.1;

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PRODOM; PD0002082 LamNT; 1
SMART; SM00180; EGF_Lam; 1
SMART; SM00180; EGF_Lam; 1
SMART; SM00180; EGF_Lam; 1
PROSITE; PS00022; EGF_1; 1
PROSITE; PS01186; EGF_2; 2
PROSITE; PS01186; EGF_2; 2
PROSITE; PS01248; LAMNT; 1
PROSITE; PS01248; LAMNT; C
G1yCoprotein; Basement mem
Laminin EGF-11ke domain; C
SIGNALN 33 1798
DOMAIN 410 469
DOMAIN 400 521
DOMAIN 783 830.
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DISULFID 285 310
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DOMAIN 1472 491
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EMBL; X796
EMBL; S775
EMBL; S775
HSSP; P024
MIM; 15032
InterPro;
InterPro;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        268156;
; X79683;
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150325;
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IPR001886; LamNT.
IPR002049; Laminin_EGF.
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CAA56130.
AAB34682.
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; EGF_1; 10.
; EGF_2; 2.
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in; Cell ad
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        LAMININ EGF-LI
LAMINI
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LAMININ N-TERMINAL
LAMININ BEF-LIKE 1.
LAMININ BEF-LIKE 2.
LAMININ BEF-LIKE 3.
LAMININ BEF-LIKE 5.
LAMININ BEF-LIKE 5.
LAMININ BEF-LIKE 7.
LAMININ BEF-LIKE 7.
LAMININ BEF-LIKE 9.
LAMININ BEF-LIKE 11.
LAMININ BEF-LIKE 11.
LAMININ BEF-LIKE 11.
LAMININ BEF-LIKE 13.
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        ( SIMILARITY (  SIMILARITY (   )))
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SEQUENCE OF 1-2628 FROM N.
MEDLINE=91264789; PubMed=2
Nissinen M., Vuolteenaho R
Tryggvason K.;
"Primary structure of the
in human tissues.";
                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.

MEDLINE-91333420; PubMed-17

Haaparanta T., Uitto J., Ru

"Molecular cloning of the c

Matrix 11:151-160(1991).
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        Biochem. J. 276:369-379(1991).
[3]
SEQUENCE OF 2397-3072 FROM N.A.
MEDLINE-89280632; PubMed=2733383;
Olsen D., Nagayoshi T., Fazio M.,
Sanborn D., Sasaki T., Kuivaniemi
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
NCBI_TaxID=9606;
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J. 276:369-379(1991)
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Timpl R., Uitto J.;

RA Timpl R., Uitto J.;

RT and B2 chains, and expression of the corresponding genes in human reskin and cultured cells.";

RT skin and cultured cells.";

RL Lab. Invest. 60:772-782(1989).

CC -i- FUNCTION: BINDING TO CELLS VIA A HIGH AFFINITY RECEPTOR, LAMININ IS THOUGHT TO MEDIATE THE ATTACHMENT, MIGRATION, & ORGANIZATION OF CELLS INTO TISSUES DURING ENGRAPHING CONSISTING OF THREE COMPANY OF THE EXTRACELLULAR MATRIX COMPONENTS.

CC -i- SUBUNIT: LAMININ IS A COMPLEX GLYCOPMENT BY INTERACTING COMPANY OF ELONG & THREE SHORT ARMS WITH GLOBULES AT EACH END THE ALPHA-1 CHAIN IS A SUBUNIT OF LAMININ-1 (EAS LEAMININ).

CC -i- SUBCLIULAR LOCATION: EXTRACELLULAR SETA, CAMMA), WHICH ARE BOUND THE ALPHA-1 (HAIN IS A SUBUNIT OF LAMININ-1 (EHS LAMININ) AND COMPONENTS.

CC -i- SUBCLIULAR LOCATION: EXTRACELLULAR.

CC -i- SUBCLIULAR LOCATION: EXTRACELULAR.

          Laminin
SIGNAL
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HSSP; P02468; 1KLO.
MIM; 150320; -.
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TerPro; IPR001886; Lamin.

TerPro; IPR001849; Laminin.

TerPro; IPR001849; Laminin.

TerPro; IPR001849; Laminin.

TerPro; IPR001791; Laminin.

TerPro; IRRO1791; Laminin.

TerPro; IPR001896; Lamin
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11; LamB; 2.
2; LamG; 5.
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22; EGF_1; 11.
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34; LAMININ_TYPE_EC,
35; LAM_G_DOMAIN; 5.
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IN EGF-LIKE 4.

IN EGF-LIKE 5 (N-TERMINAL).

IN EGF-LIKE 5 (C-TERMINAL).

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_PS3971;
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_O1-OCT-1996 (Rel. 34, Last sequence update)
_O1-MAR-2002 (Rel. 41, Last annotation update)
_O1-MAR-2002 (Rel. 41, Last annotation update)
_Hypothetical 108.5 kDa protein in UME3-HDA1 in
_YNL023C OR N2812.
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                                                                                                                                                         Saccharomyces cerevisiae (Baker's yeast).
Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetales; Saccharomycetaceae; Saccharomyces
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pfam; pF01422; zf-NF-X1; 5.
pfam; pF01422; zf-NF-X1; 5.
smART; sM00393; R3H; 1.
smART; SM00438; znF-NFX; 7.
smART; SM00438; znF-RING_1; FALSE_NE
pROSITE; pS003518; znF-RING_2; 1.
pROSITE; pS50089; znF-RING_2; 1.
prosite; ps50089; zn-RING_2; 1.
protectical protein; Zinc-finger; Re
Kotani E., Iwamucu M.;
Matsubara F., Yamakaw M.;
Matsubara F., Yamakaw M.;
Submitted (JAN-1993) to the EMBL/GenBank/DDBJ databases.
-i- FUNCTION: ADHESIVE PROTEIN AND RELATES TO HEMOSTASIS
ENCAPSULATION OF FOREIGN SUBSTANCES FOR SELF-DEFENSE.
-i- DEVELOPMENTAL STAGE: EXPRESSED IN HEMOCYTES DURING L/
                                                                                                                         Matsubara F.,
"Cloning and of
lectin which
factor.";
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Hypothetical
ZN_FING
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SEQUENCE
                                                                                                                                                                                                                                                                                               01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
01-NOV-1997 (Rel. 35, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DOMAIN
REPEAT
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                                                                  SEQUENCE OF 2221-3133 FROM Kotani E., Iwamoto S.I., Ta Matsubara F., Yamakawa M.;
                                                                                                                                                                                  STRAIN=FUYOU X TOKAI; TISSUE=Hemo
MEDLINE=95178544; PubMed=7873598;
                                                                                                                                                                                                                               Bombycoidea; Bombycidae; NCBI_TaxID=7091;
                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Arthropoda; Trac
Pterygota; Neoptera; Endopterygota;
                                                                                                                                                                                                                                                                            Bombyx mori (Silk moth)
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REPEAT
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InterPro; IPR000967; ZnF_NFX1.
InterPro; IPR001841; Znf_ring.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
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ota; Lepidoptera; Glossata; Ditrysia;
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pfam; pF00754; F5_F6_type_C; 2.—
pfam; pF01826; TIL; 6.
pfam; pF01826; TIL; 6.
pfam; pF01826; TIL; 6.
pfam; pF01826; TIL; 6.
pfam; pF00094; vwd; 3.
sMART; SM00021; FA58C; 2.
sMART; SM00221; VWC; 3.
sMART; SM00214; VWC; 3.
sMART; SM00216; VWD; 3.
sMART; SM00216; VWC; FALSE_NEG.
pROSITE; PS01285; FA58C_1; 2.
pROSITE; PS01285; FA58C_1; 2.
pROSITE; PS01286; FA58C_2; 2.
pROSITE; PS01286; FA58C_1; 2.
pROSITE; PS01286; FA58C_2; 2.
pROSITE; PS01286; FA58C_1; 2.
pROSITE; PS01286; PA58C_2; 2.
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2919; TIL.
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10B46; Vwd.
18846; Znf_CCHC.
10B3; fibronectin_type_1.
25_F8_type_C; 2.
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PCK5_BRACL STANDARD;

Q9NJ15; Q9NJ16; Q9NJ14;

16-OCT -2001 (Rel. 40, Created)

16-OCT -2001 (Rel. 40, Last sequence update)

16-OCT -2001 (Rel. 40, Last annotation update)

Proprotein convertase subtilisin/kexin type 5

(Proprotein convertase PC6-like) (aPC6).
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28.4%;
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Pred. No. 2.6;
8; Mismatches
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Oliva A.A. JI., Chan S.J., Steiner D.F.;
"Evolution of the prohormone convertases: identification of a monologue of PC6 in the protochordate amphioxus.";
Biochim. Biophys. Acta 1477:338-348(2000).

-i- FUNCTION: LIKELY TO REPRESENT A WIDESPREAD ENDOPROTEASE ACTIV WITHIN THE CONSTITUTIVE AND REGULATED SECRETORY PATHWAY. CAPA OF CLEAVAGE AT THE RX(K/R)R CONSENSUS MOTIF (BY SIMILARITY).

-i- CATALYTIC ACTIVITY: RELEASE OF MATURE PROTEINS FROM THEIR PROPROTEINS BY CLEAVAGE OF ARG-YAA-YG-1-ZAA BONDS, WHERE PROPROTEINS BY CLEAVAGE OF ARG-YAA-YG-1-ZAA BONDS, WHERE

ACTIVITY

CAPABLE

ANY AMINO ACID AND YAA IS

OR LYS

WHERE

ΧAΑ

SEQUENCE FROM N.A. (ISOFORMS A; B AND MEDLINE=20175281; PubMed=10708868; Oliva A.A. Jr., Chan S.J., Steiner D.F

<u>C</u>

Branchiostoma. NCBI_TaxID=7738;

Branchiostoma californiensis (California lancelet) (Amphioxus) Eukaryota; Metazoa; Chordata; Cephalochordata; Branchiostomidae

Branchiostomidae;

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Matches
                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ProDom; PD000717; P_domain; 1.

SMART; SM0181; EGF; 2.

SMART; SM00261; EU; 17;

PROSITE; PS00136; SUBTILASE_ASP; F?

PROSITE; PS00137; SUBTILASE_HIS; 1.

PROSITE; PS00138; SUBTILASE_ERF; 1.

Hydrolase; Serine protease; Glycopt Cleavage on pair of basic residues;
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InterPro; IPR002884; P_domain.
InterPro; IPR00209; Peptidase_S8
PRINTS; PR00723; SUBTILISIN.
ProDom; PD000717; P_domain; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              use by non-profit institutions as long as its content modified and this statement is not removed. Usage by an entities requires a license agreement (See http://www.isb-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This SWI
between
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EMBL; AF184616; AAF26300.1; -.

EMBL; AF184617; AAF26302.1; -.

InterPro; IPR000561; EGF-like.
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or send an email to license@isb-sib.ch).
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ISOFORM B IS A TYPE I MEMBRANE PROTEIN.
ALTERNATIVE PRODUCTS: 3 ISOFORMS; A, B (SHOWN HERE) AND C; ARE
PRODUCED BY ALTERNATIVE SPLICING.
DOMAIN: THE PROPEPTIDE DOMAIN ACTS AS AN INTRAMOLECULAR CHAPERONE
ASSISTING THE FOLDING OF THE ZYMOGEN WITHIN THE ENDOPLASMIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      European
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SIMILARITY: CONTAINS 1 HOMO B/P DOMAIN
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CEDGEYQDRDRDTAELSCRPCHQSCKTCSGPSDTDCDSCKGDDTILDRGECITSCGPGEY 1277
                                    CSQNEY----FDSLLHACIPCQLRCSSNTPPLTCQRYCCEYFDSLLHACPCL-RCSP---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                     Similarity 23.1
25; Conservative
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23.1%;
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residues; Repeat; Alternative splicing;
                                                                                                                                                                                                                                                                                                             CYS-RICH MOTIF (CRM) REGION.
CLEAVAGE (AUTO-) (BY SIMILARITY).
CHARGE RELAY SYSTEM (BY SIMILARITY).
CHARGE RELAY SYSTEM (BY SIMILARITY).
CHARGE RELAY SYSTEM (BY SIMILARITY).
N-LINKED (GLCNAC. . .) (POTENTIAL).
DDTILDRGECITSCGPGEYMDRREKKCKACHPTCKECSDEY
DDTCTACNDGFLLTDASSCEAGCP -> AENQNOASFCCFA
PREVSYLAELAGHLRYSLTDYPPOSNSPPDTYLGADRARL
                                                                         14;
                                                               Score 79; DB .
Pred. NO. 1.7;
14; Mismatches
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                                                                                                                                                                                                                      TTATSAAGRCA (IN ISOFORM C).

MISSING (IN ISOFORM C).

CHPTCKECSDEXDDTCTACNDGFLLTDASSCEAGCPPGQFL

HHGDCDSCHRECKTC -> IARCVDRRDRSWCDLVLRRNFC

VRRYFYKRCCGTCKLYMEDRPMRRGSSQPTQGRN (IN
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CYTOPLASMIC
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P02442;
21-JUL-1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Studies on the high-sulphur proteins of reduced mohair. The isolation and the amino acid sequence of protein SCMKB-M2.6.";
J. S. Afr. Chem. Inst. 28:250-263(1975).
J. S. Afr. Chem. Inst. 28:250-263(1975).
SUCH AS WOOL AND HAIR CONSIST OF MICROFIERILS EMBEDDED IN A RIGID MATRIX OF OTHER PROTEINS. THE MATRIX PROTEINS INCLUDE THE HIGH-SULFUR AND HIGH-TYROSINE KERATINS, HAVING MOLECULAR WEIGHTS OF 6-20 kDa, WHEREAS THE MICROFIBRILS CONTAIN THE LARGER, LOW-SULFUR KERATINS (40-56 kDa).
PIR; A92978; KRGT3J.
TIPLOTOLOGY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-JUL-1986 (Rel. 01, Last sequence update)
15-DEC-1998 (Rel. 37, Last annotation update)
Keratin, high-sulfur matrix protein, IIIA3 (M
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Pfam; PF01500; Keratin_B2; 1.
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Joubert F.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea Bovidae; Caprinae; Capra.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Capra hircus (Goat).
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                                                                                                                                                                                                                                                                                                                           1 CSQNEYF-DSLLHACIPCQL------RCSSNTPPL--TCQR-YCCEYFDSLLHACP
                                                                                                                                              PITCCPTSCQAVVCRPCCWATTCCQPVSVQCPCCRPTSCQP
                                                                                                                                                                                                     CLRCSPPTCQY----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STANDARD;
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119 M
; 14255 MW;
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26.7%;
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MISSING (IN MINOR COMPONENT).
; 6COCC8BFA13AB28B CRC64;
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Copyright (c) 1993 - 2000 Compugen Ltd.
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Q91650 xenopus lae	070555 mus musculu	Q9d732 mus musculu		oryct	homo	Q07628 homo sapien	Q9byq8 homo sapien	Q9z287 mus musculu	Q9bir2 paramecium	biom		homo	Þ	O	Q94hsl oryza sativ	Q91w93 mus musculu	Q9d5z7 mus musculu	Q9d644 mus musculu	Q9byp9 homo sapien	æ	Q24301 drosophila	Q9d0x9 mus musculu	o3 mus) homo	_	homo	2 homo	Q9byr3 homo sapien

ALIGNMENTS

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, Mazzarell	Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,	Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,	Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,	Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,		Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,	Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,	Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,	wa T., Saito	Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,	Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,		MEDLINE=21085660; PubMed=11217851;	STRAIN-C57BL/6J; TISSUE-COLON;	SEQUENCE FROM N.A.	[2]	Submitted (APR-1998) to the EMBL/GenBank/DDBJ databases.		member of the	ger R., Tsapis A.;	Madry C., Laabi Y., Callebaut I., Roussel J., Hatzoglou A.,		SEQUENCE FROM N.A.	[1]	•	Rodentia; Sciurognathi; Muridae;	aryota; Me	Mus musculus (Mouse).	TNFRSF17.	17).	RATION PROTEIN (TUMOR	(TrEMBLrel. 17, Last annotation	(TrEMBLrel. 08,	01-NOV-1998 (TrEMBLrel. 08, Created)	2;	O88472 PRELIMINARY: PRT: 185 AA.	ILT 1

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PRODOM; PRO02082; LAMNY; 1.
SMART; SM00180; EGF_LAM; 13.
SMART; SM00136; LAMNT; 1,
PROSITE; PS00339; AA_TRNA_LIGASE_II_2; UN
PROSITE; PS00022; EGF_1; UNKNOWN_10.
PROSITE; PS01186; EGF_2; 2.
PROSITE; PS01186; EGF_2; 2.
PROSITE; PS01186; EGF_2; 2.
PROSITE; PS01246; LAMNININ_TYPE_EGF; 12.
EGF-11ke domain; Glycoprotein; Laminin EG
SEQUENCE 1792 AA; 195723 MW; 4A4CBE02
                                                                                                                                                                                                                                               Interpro; IPR002106; AA_tRNA_ligase_II.
Interpro; IPR000561; EGF-like.
Interpro; IPR002049; Laminin_EGF.
Interpro; IPR002049; Laminin_EGF.
Interpro; IPR001886; Laminin_EGF; 13.
Pfam; PF00053; laminin_Nterm; 1.
                                                                                                                                                                                                                                                                                                                                                              "Primary structure and expression of a chicken laminin beta chain: evidence for four beta chains in birds."; watrix Biol. 16:471-481(1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A. MEDLINE-93015947; PubMed-1400373;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Functional annotation of a full-length mouse cDNA collection.";
Nature 409:685-690(2001).
EMBL; AF061505; AAC23799.1; -.
EMBL; AK020247; BAB32038.1; -.
MGD; MGI:1343050; Tnfrsf17.
SEQUENCE 185 AA; 20442 MW; 8806352B4FD26A8E CRC64;
                                                                                                                                                                                                                                                                                                                                   Matrix Biol. 16:471-481(199)
EMBL; AF038555; AAB92586.1;
HSSP; P02468; IKLO.
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Eukaryota; Metazoa; Chor
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                                                                                                                                                                                                                                                                                                                                                                                                         Liu J., Swasdison S., Xie W., Brewton R.G.,
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Sasaki H., Sato K., Schoer
Suzuki H., Toyo-oka K., Wa
Wynshar-Boris A., Yoshida
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CSQNEYFDSLLHACIPCQLRCSSN---TPPLTC--QRYCCEYFDSLLHACP-----CLR
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                            l Similarity
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                               Conservative
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                                                                                                8; LAMININ_TYPE_EGF; 12.
; Glycoprotein; Laminin EGF-like do
AA; 195723 MW; 4A4CBE0206F6A600
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Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
Oshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chordata; Craniata; Vertebrata; Euteleostomi;
Neognathae; Galliformes; Phasianidae; Phasianinae;
                                          20.2%;
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70.6%;
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Pred. No. 0.00
8; Mismatches
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A Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
A Kuehl P., Lewis S., Matsuo Y., Nikaldo I., Pesole G., Quackenbush J.,
Kuehl P., Lewis S., Matsuo Y., Nikaldo I., Pesole G., Quackenbush J.,
A Kuehl P., Lewis S., Matsuo Y., Nikaldo I., Pesole G., Quackenbush J.,
A Kuehl P., Lewis S., Matsuo M., Aono H., Baldarelli R., Barsh G.,
A Kuehl P., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
A Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
Blake J., Boifelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
A Blake J., Boit C., Fletcher C., Fujita M., Lee N.H.,
A Bulke J., Bult C., Fletcher C., Fujita M., Lee N.H.,
A Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
A Gustincich S., Hill D., Hofmann M., Rodriguez I., Sakamoto N.,
A Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
A Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
Bayashy-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
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Best Local
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TNFRSF13B OR 120009E08RIK.
Mus musculus (Mouse).
                                                                          Q9ET35;
Q9ET35;
Q1-MAR-2001
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                        TNFRSF13B
                                                 TACI PROTEIN.
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EMBL; AKO04668; BAB33457.1; -
MGD; MGI:1899411; Tnfrsf13b.
SEQUENCE 249 AA; 26981 MW;
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STRAIN-C57BL/6J; TISSUE-LUNG;
MEDLINE-21085660; PubMed-11217851;
Kawai J., Shinagawa A., Shibata K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa;
Mammalia; Eutheria;
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23; Conser
                                                                                                      (TrEMBLrel.
                                                                             (TrEMBLrel.
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Rodentia;
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19,
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Last sequence update)
Last annotation updat
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Matches
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humoral immunity.";
Nat. Immunol. 1:37-41(2000).
EMBL; AF257673; AAG00081.1; -.
EMBL; MGI:1889411; Tnfrsf13b.
MGD; MGI:1889411; Tnfrsf13b.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE-91065960; | PubMed=2250030; Wood L., Mills M., Hatzenbuhler N., Vog Wood L., Mills M., Hatzenbuhler N., Vog and skin during the halr cycle."; J. Biol. Chem. 264:21375-21380(1990).
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Mus musculus (Mouse).

"-rvota; Metazoa; Chordata;

"-ria; Rodentia;
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Q62220;
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"Additions and Corrections: Serine-rich ultra l
expression in murine hair and skin during the l
J. Biol. Chem. 26(:4024-4024(1991).
EMBL; M37760; AAA4(107.1; -
HSSP; P01064; lpr2.
HSSP; P01064; lpr2.
HSSP; MGI:1354758; Krtap5-4.
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                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A
STRAIN=BALB/C;
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STRAIN=BALB/C;
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Mammalia; Eutheria;
NCBI_TaxID=10090;
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CSQNEYFDSLLHACIPCQLRCSSNTPPLTCQRYCCEYFDSLLHACPCLRCSPPTCQYCCF
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                                                                             Similarity
                                                                                                                                                  ; IPRO01450; 4Fe4S_ferredoxin.
; IPRO01007; VWFC.
PS00198; 4Fe4S_EERREDOXIN; UNKNOWN_2.
PS01208; VWFC; UNKNOWN_2.
PS01208; VWFC; UNKNOWN_2.
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ilarity 29.6%;
Conservative
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S.A., Grewal I.S.,
f a receptor for B
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Rodentia;
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0.00012;
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InterPro; IPR00020; AnaphyJatoxin.
InterPro; IPR001020; AnaphyJatoxin.
InterPro; IPR001305; DnaJ_CXXCXGXG.
InterPro; IPR001305; VmFC.
PROSITE; P800198; 4FE4S_FERREDOXIN; UNXNOWN_1.
PROSITE; P801177; ANAPHYLATOXIN_1; UNXNOWN_1.
PROSITE; P801377; DNAJ_CXXCKGXG; UNKNOWN_1.
PROSITE; P801208; VMFC; UNKNOWN_3.
SEQUENCE 230 AA; 21781 MW; 6CC50B41B2137C23 (
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01-NOV-1996
01-DEC-2001
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01-JUN-2001
01-JUN-2001
01-JUN-2001
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J. Biol. Chem. 265:21375-2180(1990).
EMBL; M37759; AAA40106.1; -.
HSSP; P01064; 1P12.
MGD; MGI:1354732; Krtap5-1.
                                                                                               01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2001 (TrEMBLrel. 17, Last annotation update)
18 DAYS EMBRYO CDNA, RIKEN FULL-LENGTH ENRICHED L
CLONE:1110030N11, FULL INSERT SEQUENCE.
            SEQUENCE FROM N.A. STRAIN-C57BL/6J; T MEDLINE-21085660;
                                                                  Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia;
                                                                                                                                                                   Q9D141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-91065960; PubMed-2250030;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-BALB/C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q64507;
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                                                                                       Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus
                                                       NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mood L., Mills M., Hatzenbuhler N., Vo;
"Serine-rich ultra high sulfur protein
and skin during the hair cvcle.";
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                                                                                                                                                                                                                                                                                       1 CSQNEYFDSLLHACIPCQLRCSSNTPPLTCQRYCCEYFDSLLHACPCLRCSPPTCQYCCF
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  Shinagawa
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                                                                                                                                                                   PRELIMINARY;
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TISSUE=EMBRYO;
; PubMed=11217851;
awa A., Shibata K.
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                                                                                                                                                                                                                                                                   -CCKPC---CSSGCGSSCCQSSCCK--
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Rodentia;
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81 mW; 6CC50B41B2137C23
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                                                                                                                                                                                                                                                                                                           Score 94.5; D
Pred. No. 0.00
3; Mismatches
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                                                                Craniata; Ver
Sciurognathi;
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  Yoshino
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                                                                           Vertebrata;
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                                                                  Muridae;
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; Murinae; Mus
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; Murinae; Mus
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RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Golybori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Tsyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayashizaki Y.;
RA Hayashizaki Y.;
RA Hayashizaki BAB23112.1; -.
DR EMBL, AK003994; BAB2312.1; -.
DR EMBL, AK003994; BAB2312.1; -.
DR EMBL, AK003994; BAB2312.1; -.
                                                                 Query Match
Best Local S
Matches 21
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Best Local Similarity
Matches 26; Conser
                                                                                                                                                                                               SEQUENCE FROM N.A.

MEDLINE-97458245; Pubmed-9311921;

von Bulow G.U., Bram R.J.;

von Bulow G.U., Bram R.J.;

"NF-AT activation induced by a CAML-interacting necrosis factor receptor superfamily.";

Science 278:138-141(1997).

EMBL; AF023614; AAC51790.1; ...
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01-JAN-1998 (TrEMBLrel.
01-DEC-2001 (TrEMBLrel.
TRANSMEMBRANE ACTIVATOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro; IPR002494; Keratin_B2.
InterPro; IPR001010; Thionin.
Pfam; PF01500; Keratin_B2; 1.
PROSITE; PS00271; THIONIN; UNKNOWN_1.
SEQUENCE 195 AA; 20530 MW; 111B2A7E3783D0A2 CRC64;
                                                                                                                                                  InterPro; IPR001368; TNFR_c6.
PROSITE; PS00652; TNFR_NGFR_1; UNKNOWN_1.
SEQUENCE 293 AA; 31816 MW; 411799F3DE17A5EB CRC64;
                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates;
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CPEEQYWDPLLGTCMSCKTICNHQS-QRTCAAFCRSLSCRKEQGKFYDHLLR--DCISCA
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                                 CSQNEYFDSLLHACIPCQLRCSSNTPPLTCQRYC----C----EYFDSLLHACPCLRCS 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  YFDSLLHACPPATCQPYC
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                                                                  . Similarity
21; Conserv
                                                                 18.7
Milarity 28.4
Conservative
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nilarity 33.3%;
Conservative
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AND
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                                                             Score 93; DB
Pred. No. 0.00
13; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                               Last
Last
CAML
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Pred. No. 0.00035;
3; Mismatches 24;
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                                                                                                                                                                                                                                                                                                                                                                                                                             sequence update) annotation update) INTERACTOR.
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J.0006;
22;
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"Nucleotide sequence of a Human high-sulphur keratin cDNA "Nucleotide Sequence of a Human high-sulphur keratin cDNA completed (DEC-1991) to the EMBL/GenBank/DDBJ databases. EMBL; X63755; CAA45283.1; -.

REMBL; X63755; CAA45283.1; -.

RINTERPOOLOGISTE: EGF-1ike.
RINTERPOOLOGISTE: FR001036; TNFR_C6.
RINTERPOOLOGISTE: PR001138; ZN2_CY6_fungal.
RPCSITE; PS01186; EGF_2; UNKNOWN_1.
RPCSITE; PS01186; EGF_2; UNKNOWN_1.
RPCSITE; PS01208; VMFC; UNKNOWN_1.
RPCSITE; PS01208; VMFC; UNKNOWN_2.
RPCSITE; PS01208; VMFC; UNKNOWN_2.
RPCSITE; PS01208; VMFC; UNKNOWN_1.
RPCSITE; PS01208; VMFC; UNKNOWN_2.
RPCSITE; PS01208; VMFC; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
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Q9D225;
Q1-JUN-2001
01-JUN-2001
01-DEC-2001
                                                                                                                                A030009A09RIN.
A030009A09RIN.
Mus musculus (Mouse).
Thervota; Metazoa; Chordata;
Theria; Rodentia;
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Q14564;
Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T., Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (Human),
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                             STRAIN=C57BL/6J; TISSUE-SKIN;
MEDLINE=21085660; PubMed=11217851;
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01-DEC-2001
                                                                                                        SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                 CSQ-----CSCCKPC--CCSSGCGSSCCQCSCCKPYCSQCSCCKPCCSSSGRGSSCCQ 127
                                                                                                                                                                                                                                                                                                                                                                                                         CSQNEYFDSLLHACIPCQLRCSSNTPPLTCQRYCCEYFDSLLHAC-PCLR-----
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27; Conserv
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Pred. No. 0.00
5; Mismatches
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Catarrhini; Hominidae,
                                                                                                                                                                                                                                                                PRT;
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RA Blake J. Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Gustincich S., Hlll D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayashizaki Y.;
RT "Functional annotation of a full-length mouse cDNA collection.";
RL Nature 409:685-690(2001).
RBHL; AK020700; HAB32181.1; -...
PR MSD; McT. 100.
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Best Local S
Matches 27
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Best Local
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                                                                                                                                                                      Rogers M.A., Langbein L., Winter H., Ehmann C., Korn B., "Characterization of a cluster of human high/ ultrahigh associated proteins on chromosome 17q12-21."; Submitted (OCT-2000) to the EMBL/GenBank/DDBJ databases. EMBL; AJ406934; CAC27573.1; -. InterPro; IPR002494; Keratin_B2. InterPro; IPR002494; Keratin_B2. InterPro; IPR003198; TNFR_C6. Pfam; PF01500; Kepatin_B2; 1. PROSITE; PS00652; TNFR_NGFR_1; UNKNOWN_1.
                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=9606;
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01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-OCT-2001 (TrEMBLrel. 18, Last annotation update)
KERATIN ASSOCIATED PROTEIN 4.2.
                                                                                                                                                                                                                                                                                                                                                                              TISSUE-SCALP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KRTAP4.2
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                                         LLHACIP--CQLRC-----
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    LENCCRPSCCQT
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IPR001007; VWFC.
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                                                                              Conservative
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08; VWFC; UNKNOWN_
AA; 23407 MW; 9
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TCCRTTCCRPSCCVSSCCRPQCCQSVCCQPTCCSPSCCQTTCCRTTCC
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Primates;
                                                                                            18.4%;
29.7%;
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25
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Pred. No. 0.00
5; Mismatches
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Pred. No. 0.
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                                     SSNTPPLTCQRYCCEYFDSLLHAC -- PCLR---C
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les 38;
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                                                                                                               Length 136;
                                                                            Indels
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A KUGGERS M.A., Langbein L., Winter H., Ehmann C., I
"Characterization of a cluster of human high/ ult
r associated proteins on chromosome 17q12-21.";
Submitted (OCT-2000) to the EMBL/GenBank/DDBJ dat
R EMBL; AJ406937; CAC27576.1; -.
R InterPro; IPR0012494; Keratin_B2.
R InterPro; IPR001304; lectin_C.
R InterPro; IPR001308; TNFR_C6.
R InterPro; IPR001307; VWFC.
InterPro; IPR001007; VWFC.
PROSITE; PS006052; TNFR_NGFR_1; UNKNOWN_1.
PROSITE; PS00652; TNFR_NGFR_1; UNKNOWN_1.
PROSITE; PS01208; VWFC; UNKNOWN_2.
SEQUENCE 186 AA; 19916 MW; 034D9C7343D4F63A CI
                                                                                                                                                                                                                                 01-NOV-1996
01-NOV-1996
01-DEC-2001
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01-JUN-2001
01-OCT-2001
                                                        SEQUENCE FROM N.A. MEDLINE-89140394; PubMed=2465353; MCNab A.R., Wood L., Theriault N., "An ultra-high sulfur keratin gene hair growth.";
Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                01-NOV-1996 (TrEMBLrel. 01, 01-NOV-1996 (TrEMBLrel. 01, 01-DEC-2001 (TrEMBLrel. 19, 01-TRA-HIGH SULPHUR KERATIN.
                                                                                                                                                                                                                                                                          Q64526;
                                                                                                                                                                                                                                                                                           Q64526
                                                                                                                                            NCBI_TaxID=10090;
                                                                                                                                                                                                      KRTAP9-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE=SCALP;
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Mammalia; Eutheria;
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Primates;
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Last seq
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Pred. No. 0.0006;
5; Mismatches 28;
                                                                                                                                                                        Craniata; Vertebrata; Euteleostomi;
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                                                                                    T.,
                                                                                                                                                          Muridae;
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ultrahigh keratin
                                                                                   Vogeli
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 186;
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                                                                                                                                                          Murinae;
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                                                                                    G.;
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RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Kadota K., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Frunno M., Aono H., Baldareili R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Blake J., Boffelli D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
RA Gustincich S., Ringwald M., Rodriguez I., Sakamoto N.,
Sasaki H., Toyo-oka K., Wang K.H., Weltz C., Whittaker C., Wilming L.,
RA Mayushiw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
Query Match
Best Local S
Matches 23
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Best Local Similarity
Matches 25; Conserv
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InterPro; IPR001010; Thionin.
InterPro; IPR0010168; TNFR_c6.
InterPro; IPR001007; VWFC.
Pfam; PF01500; Keratin_B2; 1.
PR0SITE; PS006271; THIONIN; 1.
PROSITE; PS00627; TNFR_NGFR_1; UNKNOWN_1.
PROSITE; PS01208; VWFC; UNKNOWN_1.
SEQUENCE 186 AA; 19658 MW; 61D6BFDAB72C
                                                                                           Interpro: IPR002494; Keratin_B2.
Interpro: IPR001010; Thionin.
Pfam; PF01500; Keratin_B2; 1.
PROSITE; PS00271; THIONIN; UNKNOWN_1.
SEQUENCE 191 AA; 20088 MW; 522B84
                                                                                                                                                                                         "Functional annotation of a functure 409:685-690(2001), EMBL, AK017437; BAB30743.1; -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
STRAIN-C57BL/6J; TISSUE-HEAD;
MEDLINE-21085660; PubMed-11217851;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JUN-2001 (TrEMBLrel.: 17, Created)
01-JUN-2001 (TrEMBLrel.: 17, Last sequence update)
01-JUN-2001 (TrEMBLrel.: 17, Last annotation update)
10 DAYS NEONATE HEAD CDNA, RIKEN FULL-LENGTH ENRICHED LIBRARY,
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Hayashizaki Y.;
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  Conservative
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Pred. No. 0.00
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PHELLELL...
Q9BYQ3;
01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-OCT-2001 (TrEMBLrel. 18, Last annotation update)
01-OCT-2001 (PROMETRIC 9.3.
                                                                                                                                                                  Rogers M.A., Langbein L., Winter H., Ehmann C., Korn B., "Characterization of a cluster of human high/ultrahigh k associated proteins on chromosome 17q12-21.";
Submitted (OCT-2000) to the EMBL/GenBank/DDBJ databases.
EMBL; AJ405947; CAC27586.1; -.
InterPro; IPR002494; Keratin_B2.
InterPro; IPR001368; TNFR_C6.
Pfam; PF01500; Keratin_B2; 1.
PROSITE; PS00652; TNFR_NER_1; UNKNOWN_1.
SEQUENCE 159 AA; 16853 MW; 375CC1E52EECDE68 CRC64;
                                                                                                                                                                                                                                                                                                                                                Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                  MTHCCSPCCQPTCCRTTCWQPTTVTTCSSTP--CCQPSCC---
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                        TCQYCCFHSEYFDSLLHACPPATCQPYC
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Human digestive sy	Ⴊ.		Drosophila melanog	Human protein SEQ			Human polypeptide	rotein	#7105	Peptide #6193 enco	Human bone marrow	μ	#6265	#7027	#4617	#4852	le #47	me n	Human brain expres	#4647	Peptide #4868 enco	#4761	tumou	n TACI prote	_	Human neutrokine-a		Human TACI splice	Human lymphocyte s	Novel human diagno	Novel human diagno	otein SE	A murine ztnf4, a

ALIGNMENTS

AAE00507

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AAE00507 standard;

Protein;

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AAE00507;

Chimeric Chimeric gene therapy; cancer; nephrotropic; renal disorder; autoimmune disease; carcinoma; lung; colon; breast; prostate; Grave's disease; hypertension; systemic lupus erythematosus; SLE; inflammation; cardiovascular disease; B-cell lympho-proliferative disorder; BCM; immunosuppressive disease; organ transplantation; HIV; human immunodeficiency virus; TNF; murine; tumour necrosis factor; B cell maturation protein; BCMA; fusion protein; Domain Human; Human BCMA-Immunoglobulin G Fc region fusion construct. 31-JUL-2001 (first entry) Region Region Protein Key Protein immunoglobulin G; A Proliferation Inducing Ligand Receptor; APRIL-R; cytostatic; 1.1 Homo sapiens. Mus sp. /note= "Derived from human I
24..302
/label= Cysteine_rich_domain 76..302 /label= Signal_peptide
/note= "Derived from murine Ig kappa sequence" Location/Qualifiers /note= "Derived /label= Mature_human_BCMA_IgG_Fc_fusion_protein IgG; Fc "Derived from human IgG region. from human BCMA protein"

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RESULT AABG0699 ID AABG KXX AABG KXX AABG XXX AABG XXX DT 22-h XXX Huma KW Lmm 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CC A Proliferation Inducing Ligand Receptor (APRIL-R) also referred as CC B cell maturation protein (BCM or BCMA) antagonist that antagonises the CC interaction between APRIL and its cognate receptor(s). This method is CC useful for treating undesired cell proliferation such as cancer or CC carcinoma e.g. human lung carcinoma, colon carcinoma, breast carcinoma, CC prostate carcinoma, and other carcinoma whose proliferation is modulated by APRIL. It is also useful for treating autoimmune diseases (Grave's CC disease, systemic lupus erythematosus-SLE); hypertension, cardiovascular CC diseases, renal disorders, B-cell lympho-proliferative disorders, CC diseases, renal disorders, organ transplantation, inflammation and CC luman immunodeficiency virus (HIV), and for treating, suppressing or CC altering an immune response involving a signalling pathway between CC APRIL-R and its ligand. APRIL-R his also useful in gene therapy. CC The present sequence is a fusion construct containing human APRIL-R CC also referred as BCMA or BCM protein, Fc region of human immunoglobulin CC (IgG) and a signal sequence from murine Ig kappa cDNA.
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11-FEB-2000;
30-JUN-2000;
                         Human BAFF-R; BAFF receptor; TNF family; immunoregulatory agent; immune-related disorder; B-cell growth inhibitor; B-cell maturation inhibitor; immunoglobulin production inhibitor;
   autoimmune
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2000US-0215688.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     relates to a method of treating a mammal for a condition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Thompson
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cachero T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 205; DB 22;
Pred. No. 1.9e-10;
2; Mismatches 9;
                                                                                                                                                        IgG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ambrose C,
                                                                                                                                                        БC
                                                                                                                                                  fusion
      disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 302;
                                                                                                                                                     protein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rennert
      hypertension;
                                                                                                                                                        BAFF-R-FC
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Matches
                                                                                                                                                               Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               related disorders. BAFF-R, fusion proteins containing it, and BAFF-R-specific antibodies can be used for inhibiting B-cell growth, dendritic cell-induced B-cell growth and maturation, and immunoglobulin production, and in the treatment of autoimmune disorders, B-cell lymphoproliferative disorders, hypertension and renal disorders. The BAFF-R proteins may also be used in the treatment of immunosuppressive disorders and HIV infection, and in patients undergoing organ transplantation. The BAFF-R proteins or BAFF-R specific antibodies may be used for treating, suppressing or altering an immune response involving a signalling pathway between BAFF-R and BAFF, thereby inhibiting inflammation. Since BAFF-R such as systemic lupus erythematosus, autoimmune haemolytic anaemia, crave's disease, multiple myeloma, B-cell carcinomas, leukaemia, rapidly progressive glomerulonephritis, and lymphomas. Nucleic acids encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-AUG-1999;
11-FEB-2000;
18-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to the use of a BAFF receptor (BAFF-R, also known as BCMA) protein, or a BAFF-R fusion protein as an agent for the treatment of a variety of immune-related disorders. BAFF-R is a member of the TNF (tumour necrosis factor) family, acting as an immunoregulatory agent, and also plays a role in the development of hypertension and related disorders. BAFF-R, fusion proteins containing it, and BAFF-R-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  renal usocuer, Ammunocorrespondent or systemic lupus erythematosus organ transplantation; antiinflammatory; systemic lupus erythematosus autoimmune haemolytic anaemia; Grave's disease; multiple myeloma; B-cell carcinoma; leukaemia; rapidly progressive glomerulonephritis; lumonhoma: dene therapy; cancer; tumour; IgG FC; fusion construct.
                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                          comprising a mouse of human BAFF-R and
                                                                                                                                                                                                                                                                                                                                                                                               human BAFF-R may be used in gene therapy to treat tumours, lymphoma: autoimmune disorders and inherited B-cell-associated disorders. The present sequence represents the BAFF-R fusion protein BAFF-R-FC, comprising a mouse IgG-Kappa signal sequence, residues 1-153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Inhibiting dendritic cell-induced B-cell growth, maturation and B-cell lympho-proliferative disorder by administering BAFF-receptor polypeptide, chimeric molecule comprising receptor or anti-BAFF-R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200112812-A2
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Chimeric -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 4; Fig 2; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antibody homolog
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   31
                                                                1 CSQNEYFDSLLHACIPCQLRCSSNTPPLTCQRYC-CEYFDSL-----LHACPCLRCSPP 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001-202866/20
DB; AAF59999.
csqneyfdsllhacipcqlrcssntppltcqrycnasvtnsvkgvdkthtcp--pcpap 87
                                                                                                                                    40;
                                                                                                                                                                   Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Browning
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
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2000US-0181684.
2000US-0183536.
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                                                                                                                                                                                                                                                                                                                                                          igG-kappa signal sequence,
a human IgG Fc sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'n
                                                                                                                                                               41.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ambrose
                                                                                                                                                            Score 205; DB 22; Pred. No. 1.9e-10;
                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tschopp J,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Schneider
                                                                                                                                                                                              Length 302;
                                                                                                                             Indels
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Best Local Similarity
                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                              The present sequence represents a BCMA (not defined) polypeptide. BCMA is a necrosis factor (NF)-kB activator. The method of the invention is used to identify compounds which modulate BCMA activity (and thus NF-kB activity). The specification describes a method of identifying a polypeptide which increases gene expression from a promoter. The method involves contacting a library of with a cell which expresses a recombinant anti-del death gene and a reporter gene operably linked to the promoter, and then determining whether the expression of the reporter gene is altered as a result of contact with library. The method is useful for identifying polypeptides which increase or decrease gene expression from a promoter. The BCMA polypeptide or nucleic acid are useful for preparing a pharmaceutical composition for treating cancer, apoptosis, viral infections, inflammatory response, such as rheumatoid arthitis, inflammatory bowel disease or septic shock BCMA is useful for identification and the factor of the promoter of the polypeptide of the factor of the second of the factor of the promoter.
               AAY94001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI;
                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 32; Fig 7A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Identifying a modulator of gene expression for drug designing, by contacting a compound library with a cell expressing an anti-cell degeneration in reporter gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BCMA; necrosis factor-kB.activator; NF-kB; gene expression; cancer; anti-cell death dene; apoptosis; viral infection; inflammatory response; rheumatoid arthritis; inflammatory bowel disease; septic shock.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAB08843 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-FEB-2000;
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                                                                                                                                                                                                                                                                     identifying compounds
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                                                                                    csqneyfdsllhacipcqlrcssntppltcqryc
                                                                                                                   CSQNEYFDSLLHACIPCQLRCSSNTPPLTCQRYC
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               standard;
                                                                                                                                                                                                                          184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence
                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                note-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            53pp; English
            Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of human.
                                                                                                                                              40.4%; Score 201; Di
100.0%; Pred. No. 2.1
tive 0; Mismatches
                                                                                                                                                                                                                                                                      that modulate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "putative transmembrane domain"
              184
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              AΑ
                                                                                                                                                                                                                                                                   NF-kB expression
                                                                                                                                               2.8e-10;
thes 0;
                                                                                       41
                                                                                                                  34
                                                                                                                                                                             DB 21;
                                                                                                                                                                          Length 184;
                                                                                                                                                                                                                                                                   and thus for drug
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뮹 Qγ

Query Match Best Local Matches

Similarity

40.4%;

Score 201; Pred. No.

N DB 21; 2.8e-10;

Length 184;

0

Gaps

0,

Conservative

0,

Mismatches

34

Sequence

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The present sequence represents a human BCMA protein, a B cell protein CC related to transmembrane activator and CAML-interactor (TACI) receptor. TRCI is a tumour necrosis factor (TNF) receptor. The extracellular CC TACI is a tumour necrosis factor (TNF) receptor. The extracellular CC domains of BR332 (an isoform of TACI). TACI or BCMA (a related B cell Protein) receptor contain a cysteine rich domain, and are used for CC inhibiting ztnf4 activity. Ztnf4 is a TNF ligand. They may also be used CC with activated or resting B lymphocytes, effector T-cells, or with CC antibody production. The antibody production is associated with an CC antibody production. The antibody production is associated with an CC antibody production. The antibody production is associated with an CC antibody production. The antibody production is associated with an CC antibody production is associated with an CC antibody production and the selected from systemic lupus erythematosus, myasthenia CC and BR43x2, TACI or BCMA receptor-ligand engagement is associated with CC asthma, bronchitis, emphysema, end stage renal failure, CC amplication, praft versus host disease, inflammation, insulin dependent CC amplication, graft versus host disease, inflammation, insulin dependent CC amplication of the production of the produc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ztnf4 activity; antibody production; autoimmune disease; amyloidosis
systemic lupus erythematosus; myasthemia gravis; multiple sclerosis;
rheumatoid arthritis; asthma; bronchitis; emphysema; pyelonephritis;
end stage renal failure; glomerulonephritis; vasculitis; nephritis;
renal neoplasm; multiple myeloma; lymphoma; light chain neuropathy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Inhibiting ztnf4 activity in a mammal, to treat autoimmune diseases, renal disease, graft versus host disease, and inflammation, comprises administering a BR43x2, TACI or BCMA extracellular domain polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               immune response; immunosuppression; graft rejection; joint pain; graft versus host disease; inflammation; swelling; anaemia; septinsulin dependent diabetes mellitus; Crohn's disease; hypertensi
                                                   agonists or antagonists can stenosis, or occlusion, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2000-452538/39
N-PSDB; AAA58559.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-JAN-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A human BCMA protein, a B
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ZYMO ) ZYMOGENETICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           renal artery stenosis; occlusion; cholesterol;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Page 152; 175pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
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                                                and BCMA polypeptides, fusions be used to treat hypertension, cholesterol or renal emboli.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Yee
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hypertension;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                amyloidosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            septic shock,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tor; TNF;
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AAE09241

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AAE09241 standard; Protein;

184

AAE09241;

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RESULT
AAE00506
ID AAE0
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AC AAE0
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                                                                                                                                                                                                                         Query Match
Best Local
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                                                                                                                                                                                                                                                         The invention relates to methods of using one or more agonists or antagonists to modulate the activity of the members of TNF (tumour necrosis factor) especially TALL-1, APRIL and TNF receptor (TNFR) e.g. TACI or BCMA. The method is useful for treating pathological conditions or diseases associated with increased TALL-1 and APRIL expression or activity. TALL-1 and APRIL antagonists are used to block the interaction between APRIL and TALL-1 with TACI or BCMA. They are useful for treating a mammal suffering from cancer such as leukaemia, lymphoma, myeloma, cancers of lung and colon and autoimmune diseases e.g. rheumatoid arthritis, multiple sclerosis, psoriasis and lupus erythematosus. The present sequence is human
 AAE00506;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Inhibiting or neutralizing TALL-1 or APRIL polypeptide biological activity, for treating autoimmune disorders and cancer, comprises exposing the cells to TALL-1 or APRIL polypeptide agonists or antagonists -
                            AAE00506 standard; Protein; 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; TNF; tumour necrosis factor; TALL-1; APRIL; TNF receptor;
TNFR; TACI; BCMA; therapy; cancer; leukaemia; myeloma; lymphoma;
autoimmune disease; rheumatoid arthritis; multiple sclerosis;
                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                               Example 2; Fig 2; 160pp; English.
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22-AUG-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ashkenazi AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-NOV-2000;
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                                                                                                                        CSQNEYFDSLLHACIPCQLRCSSNTPPLTCQRYC 34
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                                                                                             csqneyfdsllhacipcqlrcssntppltcqryc
                                                                                                                                                   h 40.4%;
Similarity 100.0%;
34; Conservative (
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2000US-0226986
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                                                                                                                                                  Score 201; DB 22; Pred. No. 2.8e-10; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kim KJ,
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                                                                                                                                                                             Length 184;
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RESULT AAB60698

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Best Local S
Matches 34
                                                                                                                                                                                                                                                                         associated with undesired cell proliferation such as cancer or carcinoma. The method involves administering a composition comprising A proliferation Inducing Ligand Receptor (APRIL-R) also referred as B cell maturation protein (BCM or BCMA) antagonist that antagonises the interaction between APRIL and its cognate receptor(s). This method is useful for treating undesired cell proliferation such as cancer or carcinoma e.g. human lung carcinoma, colon carcinoma, breast carcinoma, prostate carcinoma, and other carcinomas whose proliferation is modulated by APRIL. It is also useful for treating autoimmune diseases (Grave's disease, systemic lupus erythematosus SLE); hypertension, cardiovascular diseases, renal disorders, B-cell lympho-proliferative disorders, immunosuppressive diseases, organ transplantation, inflammation and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-OCT-1999;
11-FEB-2000;
30-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Treating a mammal for a condition associated with undesired cell proliferation such as cancer or carcinoma, comprises administering a composition comprising A Proliferation Inducing Ligand Receptor
                                                                                                                                                           Sequence
                                                                                                                                                                                                          human immunodeficiency virus (HIV), and for treating, suppressing caltering an immune response involving a signalling pathway between APRIL-R and its ligand. APRIL-R that is also useful in gene therapy. The present sequence is human APRIL-R also referred as BCMA or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 3; Fig 3A; 85pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-OCT-2000; 2000WO-US27579
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               carcinoma; lung; colon; breast; prostate; Grave's disease; hypertension; systemic lupus erythematosus; SLE; inflammation; cardiovascular disease; B-cell lympho-proliferative disorder; BCM; immunosuppressive disease; organ transplantation; HIV; human immunodeficiency virus; TNF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene therapy; cancer; no
carcinoma; lung; colon;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a method of treating a mammal for a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (APRIL-R) antagonist
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (BIOJ ) BIOGEN INC. (APOT-) APOTECH R &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200124811-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tumour necrosis factor; BCMA; B cell maturation protein.
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                                                                                    Local Similarity
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                  1 CSQNEYFDSLLHACIPCQLRCSSNTPPLTCQRYC 34
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csqneyfdsllhacipcqlrcssntppltcqryc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A Proliferation Inducing Ligand Receptor; APRIL-R; cytostatic; herapy; cancer; nephrotropic; renal disorder; autoimmune disease; home; lung; colon; breast; prostate; Grave's disease; hypertension;
                                                                                                                                                           184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-0157933.
; 2000US-0181807.
; 2000US-0215688.
                                                                      Conservative
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100.0%;
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                                                                                    Score 201; DB 2; Pred. No. 2.8e-
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AAB60698

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Protein;

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The invention relates to the use of a BAFF receptor (BAFF-R, also known CC as BCMA) protein, or a BAFF-R fusion protein as an agent for the treatment of a variety of immune-related disorders. BAFF-R is a member of the TNF (tumour necrosis factor) family, acting as an immunoregulatory cc agent, and also plays a role in the development of hypertension and related disorders. BAFF-R, fusion proteins containing it, and BAFF-R cc specific antibodies can be used for inhibiting B-cell growth, dendritic cell-induced B-cell growth and maturation, and immunoglobulin production, and in the treatment of autoimmune disorders, B-cell growth, dendritive cliptoners, hypertension and renal disorders, B-cell proteins may also be used in the treatment of immunosuppressive disorders and HIV cliptoners, and in patients undergoing organ transplantation. The BAFF-R proteins or BAFF-R specific antibodies may be used for treating, cc suppressing or altering an immune response involving a signalling pathway between BAFF-R and BAFF, thereby inhibiting inflammation. Since BAFF-R cliptoners and maturation it is useful for treating diseases and manual pathematical playeth and maturation it is useful for treating diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   immune-related disorder; B-cell growth inhibitor; BCMA; B-cell maturation inhibitor; immunoglobulin production inhibitor; B-cell maturation inhibitor; immunoglobulin production inhibitor; autoimmune disorder; B-cell lymphoproliferative disorder; hypertension renal disorder; immunosuppressive disorder; HIV infection; organ transplantation; antiinflammatory; systemic lupus erythematosus; autoimmune haemolytic anaemia; Grave's disease; multiple myeloma; B-cell carcinoma; leukaemia; rapidly progressive glomerulonephritis;
                                                                                                                                                                                                        such as systemic lupus erythematosus, autoimmune haemolytic anaemia, Grave's disease, multiple myeloma, B-cell carcinomas, leukaemia, rap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Inhibiting dendritic cell-induced B-cell growth, maturation and B-cell lympho-proliferative disorder by administering BAFF-receptor polypeptide, chimeric molecule comprising receptor or anti-BAFF-R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-202866/20.
N-PSDB; AAF59998.
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(APOT-)
Sequence
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                                                                                                    human BAFF-R may be used in gene therapy to treat tumours, lympl
autoimmune disorders and inherited B-cell-associated disorders:
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                                                                                                                                                                       progressive glomer
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2000US-0181684.
2000US-0183536.
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                                                                  represents
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                                                                                                                                                                       lonephritis, and lymphomas. Nucleic acids encoding
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Query Match

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                                                                                 The present invention relates to Tumour necrosis factor (TNF) and ApoL-related Leucocyte expressed Ligand 1 (TALL-1) nucleic acid molecules, proteins (including homologues), and their antibodies. The invention in particular relates to methods for regulating the interaction between TALL-1 and TALL-1 receptors (BCMA referred as B ce maturation factor) to regulate monocyte, macrophage and B lymphocyte mediated immune responses. TALL-1 protein is useful for identifying compounds that regulate B lymphocyte proliferation. It is also useful treating B lymphocyte associated autoimmune disorders like rheumatoid arthritis, systemic lupus erythematosus (SLE), insulin dependent diabe mellitus, multiple sclerosis, myasthenia gravis, Grave's disease, autoimmune haemolytic anaemia, autoimmune thrombocytopenia purpura, goodpasture's syndrome, pemphigus vulgaris, acute rheumatic fever, postitist and contractific modeca.
post-streptococcal glomerulonephritis, or polyarteritis nodosa. The TALL-1 protein and its corresponding nucleic acid sequence are useful in diagnostic assays.

The present sequence is a human B cell maturation factor (BCMA) protein. It is the receptor for TALL-1 protein. BCMA gene is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                therapy; autoimmune disorder; rheumatoid arthritis; multiple sclerosis; systemic lupus erythematosus; SLE; insulin dependent diabetes mellitus; thrombocytopenia purpura; acute rheumatic fever; Goodpasture's syndrome;
                                                                                                                                                                                                                                                                                                                                                                               lymphocyte autoimmune
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01-MAY-2000; 2000US-0201012.
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                                                                                                                                                                                                                                                                                                                                              Claim
                                                                                                                                                                                                                                                                                                                                                                             Isolated TALL-1 protein is used to identify compounds that regulate lymphocyte proliferation, used to treat B lymphocyte associated autoimmune disorders -
                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-PSDB; AAD02125
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              post-streptococcal glomerulonephritis; polyarteritis nodosa;
B cell maturation factor; pemphigus vulgaris; B-lymphocyte pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                haemolytic anaemia; Grave's disease; myasthenia gravis; chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human B cell maturation factor (BCMA) protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tumour necrosis factor and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             œ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CSQNEYFDSLLHACIPCQLRCSSNTPPLTCQRYC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tumour Necrosis Factor; TNF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAT JEWISH MEDICAL & RES CENT
                                                                                                                                                                                                                                                                                                                                            Page 104-105; 112pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /label= Extracellular_domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Protein; 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Apol-related Leucocyte expressed Ligand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       immunosuppressant; TALL-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2.8e-10;
hes 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B-lymphocyte proliferation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                             diabetes
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RESULT
AAB60700
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     located on spleen and
                                                                                                                                                                                                                                                                                                                                17-AUG-1999;
11-FEB-2000;
18-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     immune-related disorder; B-cell growth inhibitor; BCMA;
B-cell maturation inhibitor; immunoglobulin production inhibitor;
autoimmune disorder; B-cell lymphoproliferative disorder; hypertension
renal disorder; immunosuppressive disorder; HIV infection;
organ transplantation; antiinflammatory; systemic lupus erythematosus;
autoimmune haemolytic anaemia; Grave's disease; multiple myeloma;
B-cell carcinoma; leukaemia; rapidly progressive glomerulonephritis;
                agent, and also planelated disorders.
                                          The invention relates to the use of a BAFF receptor (BAFF-R, also known as BCMA) protein, or a BAFF-R fusion protein as an agent for the treatment of a variety of immune-related disorders. BAFF-R is a member the TNF (tumour necrosis factor) family, acting as an immunoregulatory
                                                                                                                                                    Inhibiting dendritic cell-induced B-cell growth, maturation and lympho-proliferative disorder by administering BAFF-receptor polypeptide, chimeric molecule comprising receptor or anti-BAFF-
                                                                                                                                                                                                                                                                                         (BIOJ )
(APOT-)
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                                                                                                               Example
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                                                                                                                                                                                                                                                               маскау Е,
                                                                                                                                                                                                                                                                                                                                                                                       16-AUG-2000; 2000WO-US22507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                lymphoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             located on chromosome 16. In human tissues, BCMA is expressed by spleen and lymph nodes but not by brain, mustel, heart, lung, ki spleen and testis and placenta. BCMA mRNA is absent in the pro-B lymphocyte stage but its expression increases with B lymphocyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                        2001-202866/20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BAFF
F (tumour necrosis factor) family, acting as an immunoregulatory and also plays a role in the development of hypertension and also plays a role in the development of hypertension and BAFF-R, fusion proteins containing it, and BAFF-R disorders. BAFF-R, fusion proteins containing it, and BAFF-R.
                                                                                                                                                                                                                                                                                         BIOGEN INC.
APOTECH R & D
                                                                                                               1:
                                                                                                                                                                                                            AAF60000
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                                                                                                                                          homolog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                gene
                                                                                                                                                                                                                                                              Browning
                                                                                                              Fig 3; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  receptor (BAFF-R)
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                                                                                                                                                                                                                                                                                                                                 2000US-0181684
2000US-0183536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BAFF receptor; TNF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ξ,
                                                                                                                                                                                                                                                                                                                                                            99US-0149378.
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100.0%;
                                                                                                                                                                                                                                                                                          SA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cancer;
                                                                                                                                                                                                                                                               Ambrose
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               157
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence
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Pred. No. 2.8e-10;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       family;
                                                                                                                                                                                                                                                              Tschopp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               encoded by A plasmid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              plasmid pJST535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       immunoregulatory agent;
                                                                                                                                                                                                                                                               ŗ
                                                                                                                                                                                                                                                               Schneider
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 184;
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                                                                                                                                                        anti-BAFF-R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hypertension;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               pJST535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                   also known
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      l by
kidney,
                                                                                                                                                                                 B-cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                         of.
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RESULT :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cell-induced B-cell growth and maturation, and immunoglobulin production, and in the treatment of autoimmune disorders, B-cell lymphoproliferative disorders, hypertension and renal disorders. B-BAFF-R proteins may also be used in the treatment of immunosuppressive disorders and HIV infection, and in patients undergoing organ transplantation. The BAFF-R proteins or BAFF-R specific antibodies may be used for treating, suppressing or altering an immune response involving a signalling pathway between BAFF-R and BAFF, thereby inhibiting inflammation. Since BAFF-R inhibits B-cell growth and maturation it is useful for treating diseases such as systemic lupus erythematosus, autoimmune haemolytic anaemia, rapidly created as the control of 
                                                                                                          contacting a compound --- qene and reporter gene, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Key
Domain
                                                             Claim 32; Fig 7B; 53pp; English.
                                                                                                                                                                                                                     WPI;
                                                                                                                                                                                                                                                                   Seed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           progressive glomerulonephritis, and lymphomas. Nucleic acids encoding human BAFF-R may be used in gene therapy to treat tumours, lymphomas, autoimmune disorders and inherited B-cell-associated disorders. The present sequence represents a human BAFF-R protein sequence as encoded by plasmid PJST535. However, this BAFF-R protein sequence is 27 amino acids shorter than that given in AAB60698.
                                                                                                                                                                            Identifying
                                                                                                                                                                                                                                                                                                         (GEHO ) GEN HOSPITAL
                                                                                                                                                                                                                                                                                                                                                    24-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                             24-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200050633-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BCMA; necrosis factor-kB activator; NF-kB; gene expression; cancer; anti-cell death gene; apoptosis; viral infection; inflammatory resp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Amino acid sequence of murine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              02-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAB08844;
                                                                                                                                                                                                                                                                                                                                                                                                                                         31-AUG-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAB08844 standard;
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                                                                                                                                                   g a modulator of gene exp
a compound library with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       157
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                                                                                                                                                                                                                                                                                                                                                                                                2000WO-US04925
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                                                                                                                                                                                                                                                                                                                                                    99US-0121485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers 47..72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              entry)
                                                                                                                                                                                                                                                                                                            CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              32.0%;
90.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            inflammatory bowel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "putative transmembrane domain"
                                                                                                                             ry with a cell expressing determining alteration in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  185
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Pred. No. 9.1e-07;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BCMA polypeptide.
                                                                                                                                                                          expression for drug designing,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            septic shock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                inflammatory response;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                 in reporter
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                                                                                                                                                   an
                                                                                                                                                   igning, by
anti-cell death
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ω,
                                                                                                                               gene
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The present sequence is a necrosis factor

represents (NF)-kB act

nts a BCMA activator.

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defined) polypeptide. But method of the invention

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RESULT
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          polypeptide which increases gene expression from a promoter. The method involves contacting a library of with a cell which expresses a recombinant anti-cell death gene and a reporter gene operably linked to the promoter, and then determining whether the expression of the reporter gene is altered as a result of contact with library. The method is useful for identifying polypeptides which increase or decrease gene expression from a promoter. The BCMA polypeptide or nucleic acid are useful for preparing a pharmaceutical composition for treating cancer, apoptosis, viral infections, inflammatory response, such as rheumatoid arthritis, inflammatory bowel disease or septic shock. BCMA is useful for
   molecules,
                                                                                     Isolated TALL-1 protein is used to lymphocyte proliferation, used to tautoimmune disorders -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tumour necrosis factor and ApoL-related Leucocyte expressed Ligand 1; therapy; autoimmune disorder; rheumatoid arthritis; multiple sclerosis; systemic lupus erythematosus; SLE; insulin dependent diabetes mellitus;
               ApoL-related Leuco
                           The present invent
                                                            Claim
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                                                                                                                                                                                                                                                     06-MAY-1999;
01-MAY-2000;
                                                                                                                                                                                                                                                                                               05-MAY-2000; 2000WD-US12266
                                                                                                                                                                                                                                                                                                                                                                                         Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                   B cell maturation
                                                                                                                                                             WPI; 2001-016094/0
                                                                                                                                                                                                                        (NAJE-)
                                                                                                                                                                                                                                                                                                                              16-NOV-2000
                                                                                                                                                                                                                                                                                                                                                            WO200068378-A1
                                                                                                                                                                                                                                                                                                                                                                                                                   post-streptococca.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               thrombocytopenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Murine; Tumour Ned
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Murine B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAY71980 standard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               activity). The sp
polypeptide which
                                                                                                                                                                                                                                                                                                                                                                                                                                                    haemolytic anaemia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             dentifying compounds
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 CSQNEYFDSLLH
                                                                                                                                                                                                                                                                                                                                                                                         musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cfhseyfdsllh
                                                          37; Page 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24;
                                                                                                                                                                                                                          NAT
                                                                                                                                                  AAD02130.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cell maturation factor (BCMA) protein.
   proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27.3%;
nilarity 70.6%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     185 AA
                                                                                                                                                                                                                          JEWISH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (firs
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            specification describes a method of identifying
                                                                                                                                                                                                                                                                                                                                                                                                                gurpura; acute rheumatic fever; Goodpasture's syndrome;
la; Grave's disease; myasthenia gravis; BCMA;
n factor; pemphigus vulgaris; B-lymphocyte proliferation;
al glomerulonephritis; polyarteritis nodosa.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         compounds which modulate BCMA activity (and thus NF-kB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CIPCOLRCSSNTPPLTCORYC
ion relates to Tumour necrosis factor (TNF) and cyte expressed Ligand 1 (TALL-1) nucleic acid (including homologues), and their antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rosis Factor; TNF; immunosuppressant; TALL-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 t entry)
                                                       108; 112pp;
                                                                                                                                                                                                                        MEDICAL &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            that modulate NF-kB expression and thus for drug
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2:
                                                                                                                                                                                                                        RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 136; DB 21;
Pred. No. 0.00011;
                                                          English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ą
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                      treat
                                                                                                 identify compounds that regulate
treat B lymphocyte associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 185;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           for
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RESULT 1
AAY94006
ID AAY9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S
Matches 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Inthe activity antibody production; autoinmune disease; amyloidosis; systemic lupus erythematosus; myasthenia gravis; multiple sclerosis; rheumatoid arthritis; asthma; bronchitis; emphysema; pyelomephritis; end stage renal failure; glomerulonephritis; vasculitis; nephritis; renal neoplasm; multiple myeloma; lymphoma; light chain neuropathy; lumnune response; lumnunosuppression; graft rejection; joint pain; graft versus host disease; inflammation; swelling; anaemia; septic shinsulin dependent diabetes mellitus; Crohn's disease; hypertension; renal artery stenosis; occlusion; cholesterol; renal emboli.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       maturation factor) to regulate monocyte, macrophage and B lymphocyte mediated immune responses. TALL-1 protein is useful for identifying compounds that regulate B lymphocyte proliferation. It is also useful for treating B lymphocyte associated autoimmune disorders like rheumatoid arthritis, systemic lupus erythematosus (SLE), insulin dependent diabetes mellitus, multiple sclerosis, maysthenia gravis, Grave's disease, autoimmune haemolytic anaemia, autoimmune thrombocytopenia purpura, Goodpasture's syndrome, pemphigus vulgaris, acute rheumatic fever, post-streptococcal glomerulonephritis, or polyarteritis nodosa. The TALL-1 protein and its corresponding nucleic acid sequence are also useful in diagnostic assays.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A murine ztnf4, a tumour necrosis factor ligand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200040716-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-OCT-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAY94006 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   transmembrane activator and CAML-interactor; tumour necrosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   invention in particular relates to methods for regulating the interaction between TALL-1 and TALL-1 receptors (BCMA referred as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ហ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 CSQNEYFDSLLHACIPCQLRCSSNTPPLTCQRYC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cfhseyfdsllhackpchlrcsn--ppatcqpyc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BR43x2; TACI receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     . Similarity
24; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Protein; 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27.3%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 136; DB 22;
Pred. No. 0.00011;
Nismatches 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                extracellular domain; BCMA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B cell protein;
sis factor; TNF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                septic shock;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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Inhibiting ztnf4 activity in a mammal, to treat autoimmune diseases, renal disease, graft versus host disease, and inflammation, comprise administering a BR43x2, TACI or BCMA extracellular domain polypeptic

polypeptide

Disclosure;

Page

163;

175pp; English

N-PSDB;

AAA58566

2000-452538/39.

JA,

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Σ,

Madden

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Yee DP

07-JAN-2000;

2000WO-US00396

99US-0226533

13-JUL-2000

(ZYMO) ZYMOGENETICS INC

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CC The present sequence represents murine ztnf4, a tumour necrosis factor CC ligand. The extracellular domains of BR43x2 (an isoform of the CC transmembrane activator and CAML-interactor (TACI) receptor), TACI or CC BCMA (a related B cell protein) contain a cysteine rich domain, and are CC used for inhibiting ztnf4 activity. They may also be used for inhibiting the string B lymphocytes, effector T-cells, or with activated or resting B lymphocytes, effector T-cells, or with an CC antibody production. The antibody production is associated with an CC antibody production. The antibody production is associated with an CC antibody production selected from systemic lupus erythematous, myasthenia CC gravis, multiple sclerosis and rheumatoid arthritis. The ztnf4 activity CC and BR43x2, TACI or BCMA receptor-ligand engagement is associated with CC asthma, bronchtiis, emphysema, end stage renal failure, CC and BR43x2, TACI or sephicomas, lymphomas, light chain neuropathy, CC amyloldosis, moderating immune response, immunosuppression, graft criston, graft versus host disease, inflammation, insulin dependent CC rejection, graft versus host disease, inflammation, insulin dependent CC septic shock. BR43x2, TACI, and BCMA polypeptides, fusions, antibodies, stenosis, or occlusion, and cholesterol or renal emboli.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
                                                                                                   03-FEB-2000;
27-APR-2000;
20-JUN-2000;
19-JUL-2000;
01-SEP-2000;
15-SEP-2000;
20-OCT-2000;
Tang YT, Liu C,
Zhao QA, Wang D,
                                                                                                                                                                                                                                          05-FEB-2001; 2001WO-US04098
                                                                                                                                                                                                                                                                           09-AUG-2001.
                                                                                                                                                                                                                                                                                                            WO200157190-A2
                                                                                                                                                                                                                                                                                                                                                                         Human; cytokine; cell proliferation; cell differentiation; gene therapy; vaccine; peptide therapy; stem cell growth factor; haematopoiesis; tissue growth factor; lumnomodulatory; cancer; leukaemia; nervous system disorder; arthritis; inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-NOV-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAM79986 standard;
                                                    (HYSE-) HYSEQ INC
                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human protein SEQ ID NO 3632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              47 qgryydhllgacvscdstctqhpqqcahfc 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 HSEYFDSLLHAC------PPATCOPYC 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CSQNEYFDSLLHACIPCQLRCSSNTPPLTCQRYCCEYFDSLLHACPCLRCSPPTCQYCCF 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cpkdqywdssrkscvscaltcsqrs----qrtctdf-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               l Similarity 25.6
23; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                249 AA;
                                                                                   2000US-0496914.

2000US-0560875.

2000US-0598075.

2000US-0620325.

2000US-0654936.

2000US-0653325.

2000US-0693325.

2000US-0728422.
 Drmanac I
Wang J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19.7%;
 RT, Asundi V,
, Zhang J, Ren
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; Score 98; DB 21;
; Pred. No. 0.26;
12; Mismatches 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
   Zhou
F, (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27;
   u P,
Chen
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 Xu C, Cao Y
R, Wang ZW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
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RESULT 14
ABG08337
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to polynucleotides (AAK51456-AAK53435) and the encoded polypeptides (AAM78323-AAM80302) that exhibit activity elating to cytokine, cell proliferation or cell differentiation or which may induce production of other cytokines in other cell populations. The polynucleotides and polypeptides are useful in gene therapy, vaccines or peptide therapy. The polypeptides have various cytokine-like activities, e.g. stem cell growth factor activity, haematopoiesis regulating activity, tissue growth factor activity, haematopoiesis activity and may be useful in the diagnosis and/or treatment of cancer, leukaemia, nervous system disorders, arthritis and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    inflammation. Note: Records for SEQ ID NO 2110 (AAK52581), (AAM80020) are omitted as the relevant pages were missing at the time of publication.
                                         WPI; 2001-639362/73
                                                                                                                   31-MAR-2000; 2000US-0540217
23-AUG-2000; 2000US-0649167
                                                                                                                                                          30-MAR-2001; 2001WO-US08631
                                                                                                                                                                                                                                                                                                                                                                                  ABG08337 standard; Protein;
 New isolated polynucleotide
                                                                  Drmanac
                                                                                           (HYSE-)
                                                                                                                                                                                     11-OCT-2001
                                                                                                                                                                                                              WO200175067-A2
                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                              Human; chromosome mapping; gene mapping; gene therapy; forension food supplement; medical imaging; diagnostic; genetic disorder
                                                                                                                                                                                                                                                                                                      Novel
                                                                                                                                                                                                                                                                                                                             13-FEB-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                        ABG08337;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic acids encoding polypeptides with cytokine-like activities, useful in diagnosis and gene therapy -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Xue AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                               103 c-hptccqnt--ccrttccqptc 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        59 CFHSEYFDSLLHACPPATCQPYC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 DSLLHACIPCQLRCSSNTPPLTCQRYCCE---YFDSLLHAC---PCLR---CSPPTCQYC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001-476283/51.
                                                                                                                                                                                                                                                                                                    human diagnostic protein #8328
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                            AAS72524
                                                                                           HYSEQ INC
                                                                  RT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Yang Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Page 402;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
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                                                                  Liu C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AA;
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                                                                  Tang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19.48;
and encoded polypeptides,
                                                                                                                                                                                                                                                                                                                                                                                  256
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 96.5;
Pred. No. 0.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (AAK52582) and 3666 the sequence listing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 301;
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RESULT 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to isolated polynucleotide (I) and CD polymerase chain reaction (PCR) primers, oligomers, and for chromosome CC polymerase chain reaction (PCR) primers, oligomers, and for chromosome CC and gene mapping and in recombinant production of (II). The CC polynucleotides are also used in diagnostics as expressed sequence tags CC for identifying expressed genes. (I) is useful in gene therapy techniques CC (II). (II) is useful for generating antibodies against it, detecting or CC quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical company of sites expressing (II). (I) and (II) are useful in medical CC imaging of sites expressing (II). (I) and (II) are useful for treating CC disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in CC diagnostics, forensics, gene mapping, identification of mutations and to produce other types of data and products dependent on DNA and CC amino acid sequences. ABG00010-ABG30377 represent novel human CC diagnostic amino acid sequences of the invention.

Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO at the wince in the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local :
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                                      Drmanac RT, Liu
                                                                                                                    31-MAR-2000; 2000US-0540217
23-AUG-2000; 2000US-0649167
                                                                                                                                                                                   30-MAR-2001; 2001WO-US08631
                                                                                                                                                                                                                            11-OCT-2001.
                                                                                                                                                                                                                                                                  WO200175067-A2
                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                        Human; chromosome
                                                                                                                                                                                                                                                                                                                                                                                                               Novel human diagnostic protein #23689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 20; SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            biodiversity
                                                                             (HYSE-) HYSEQ INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABG23698;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABG23698 standard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             145 --cvpvcckpvc
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16 PCQLRCSSNTPPLTGQRYCCEYFDSLLHAC----PCLR--CSPPTCQYCCFHSEYFDSLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ftp.wipo.int/pub/published_pct_sequences.
2001-639362,
                                                                                                                                                                                                                                                                                                                                                    supplement;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             pcqsqctssctpsccqqsscq----pacctsspcqqaccvpvcckpvc---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           forensics, gene mapping, identification of mutations for genetic disorders or other traits and to assess
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ₽
                                                                                                                                                                                                                                                                                                                                              mapping; gene mapping; gene therapy; forensic medical imaging; diagnostic; genetic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   No 38696; 103pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19.1%;
30.6%;
                                    Tang YT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 95; DB 2
Pred. No. 0.49;
7; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 256;
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                                                                                                                                                                                                                                                                                                                                                                      forensic;
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imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences. ABG00010-ABG00377 represent novel human diagnostic amino acid sequences of the invention.

Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                         for identifying expressed genes. (I) is useful in gene therapy technique to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess
                                                  at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 20; SEQ ID No 54057; 103pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    biodiversity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             polynucleotides are also used in diagnostics as expressed sequence tags
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         techniques
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Search completed: May 15, 2002, 09:49:02 Job time: 47 sec Matches Query Match Best Local Similarity 196 240 --cvpvcckpvc 249 70 HACPPATCQPYC 81 16 PCQLRCSSNTPPLTCQRYCCEYFDSLLHAC----PCLR--CSPPTCQYCCFHSEYFDSLL pcqsgctssctpsccqqsscq----pacctsspcqqaccvpvcckpvc---Conservative 19.1%; Pred. No. 0. 7; Mismatche Mismatches DB 22; 0.64; 19; Length 351 Indels 24; Gaps 69

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Sequence

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Result
No.
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Perfect score:
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    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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  Minimum Match 0%
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Listing first 45 summaries
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Gapop 10.0 . Gapext 0.5
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498
1 CSQNEYFDSLLHACIPCQLR......
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2316<mark>7</mark>8 seqs, 24425594 residues
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/cyn2_6/ptodata/2/1aa/5B_COMB.pep:*
/cyn2_6/ptodata/2/1aa/6A_COMB.pep:*
/cyn2_6/ptodata/2/1aa/6B_COMB.pep:*
/cyn2_6/ptodata/2/1aa/B_COMB.pep:*
/cyn2_6/ptodata/2/1aa/PCTUS_COMB.pep:*
/cyn2_6/ptodata/2/1aa/backfiles1.pep:*
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  analysis of the total score distribution.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GenCore version
(c) 1993 - 2000
                                                                                                                                                                                                                                                                 DВ
US-08-810-572A-6
US-09-290-333-6
US-09-290-333-2
US-09-019-095A-8
US-09-019-095A-2
US-09-019-095A-2
US-09-019-095A-3
US-08-460-309-5
US-08-118-388-9
US-09-013-780-2
US-08-961-7836-2
US-08-961-7836-2
US-08-961-783-3
US-08-194-468-2
US-08-194-468-2
US-08-194-468-2
US-08-194-19261A-30
US-08-194-10261A-30
US-08-460-982-24
US-08-460-982-24
US-08-460-982-24
US-08-460-393-18
US-08-460-393-18
US-08-460-393-18
US-08-460-397-18
US-08-460-397-18
US-08-155-077-18
US-08-997-897-2
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                  sequence
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                           ; ORGANISM:
US-08-810-572A-6
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US-08-810-572A+6
                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 6, Application Patent No. 5969102
Query Match
                                             HYPOTHETICÁL: N
FRAGMENT TYPE:
ORIGINAL SOURCE:
                                                                      MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                    STREET: 411 Ha
STREET: Floor
CITY: Hackensa
                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                          07601
                                                                                                                                                                                                                                                                                                                    Hackensack
                                                                                                                                                                                                                                                                                                           New Jersey
                                                                                                                                                                                                                                                                                                   USA
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73 14.7 689 4 US-09-11/-249-2 72.5 14.6 969 2 US-08-284-941-2 72.5 14.6 969 2 US-08-284-941-2 72.5 14.6 969 2 US-08-247-642-2 72.5 14.6 969 4 US-09-265-503-2 72.5 14.6 969 5 PCT-US93-02147A-2 72.14.5 969 5 PCT-US93-02147A-2 72.14.5 366 4 US-08-312-870-07 72.14.5 366 4 US-08-312-870-07 72.14.5 446 1 US-08-307-444A-5 72.14.5 456 1 US-08-307-444A-3 72.14.5 456 1 US-08-307-444A-3 72.14.5 456 1 US-08-307-444A-3 72.14.5 456 1 US-08-307-444A-3 72.14.5 456 1 US-08-307-444A-1 72.14.5 475 1 US-08-307-444A-1 72.14.5 475 1 US-08-307-444A-1 72.14.5 475 1 US-08-307-444A-1 72.14.5 475 1 US-08-307-389-1 72.14.5 475 1 US-08-307-389-1 72.14.5 475 1 US-08-307-389-1
5 6 8 8 9 9 6 9 9 6 9 9 6 9 9 6 9 9 9 6 9 9 9 6 9 9 9 6 9 9 9 9 6 9 9 9 9 6 9 9 9 9 6 9 9 9 6 9
US-09-11/1-49-2 US-09-061-769A-2 US-09-061-769A-2 US-08-284-941-2 US-08-447-64-2 US-09-236-503-2 US-08-312-670-7 US-08-312-389-3 US-08-312-44A-1 US-08-312-44A-2 US-08-312-44A-1 US-08-312-44A-2 US-08-587-389-2

ALIGNMENTS

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Parent No. 5963102
GENERAL INFORMATION:
APPLICANT: Bram, Richard J.
APPLICANT: VON BULOW, GOLT
APPLICANT: VON BULOW, GOLT
TITLE OF INVENTION: A LYMPHOCYTE SURFACE RECEPTOR THAT BINDS
TITLE OF INVENTION: CAML, NUCLEIC ACIDS ENCODING THE SAME AND METHODS OF USE
TITLE OF INVENTION: CAML, NUCLEIC ACIDS ENCODING THE SAME AND METHODS OF USE
TITLE OF INVENTION: CAML, NUCLEIC ACIDS ENCODING THE SAME AND METHODS OF USE
TITLE OF INVENTION: CAML, NUCLEIC ACIDS ENCODING THE SAME AND METHODS OF USE
TITLE OF INVENTION: A LYMPHOCYTE SUCCESSARY

OURRESON OF SEQUENCES:
ILLANDRESSE: David A. Jackson, Esq.
STATE: Floor
CITY: Hackensack Ave, Continental Plaza, 4th

STREET: 411 Hackensack Ave, Continental Plaza, 4th

STREET: 401 Hackensack Ave, Continental Plaza, 4th

STREET: Floor
CITY: Hackensack Ave, Continental Plaza, 4th

STREET: 61007
CITY: Hackensack Ave, Continental Plaza, 4th

STREET: 70601
CONTRY: USA
ZIP: 07601
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                                                                                                                                                             Matches
                                                                                                                                                                               Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 28.4%; Matches 21; Conservative :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 INFORMATION FOR SEQ ID NO: 6: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Vei
CURRENT APPLICATION DATA:
APPLICATION UMBER: US/09/290,333
FILING DATE: 12-Apr.199
CLASSIFICATION: <UNKnown>
ATTORNEY/AGENT INFORMATION:
                                         52
91 SICGOHPROCAYFC 104
                                                                            34 CPEEQYWDPLLGTCMSCKTICNHQS-QRTCAAFCRSLSCRKEQGKFYDHLLR--DCISCA 90
                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               91 SICGQHPKQCAYFC 104
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RAL INFORMATION.
APPLICANT: Bram, Richard J.
APPLICANT: Bram, Richard J.
VON BULOW, GOLZ
TITLE OF INVENTION: A LYMPHOCYTE SURFACE RECEPTOR THAT BINDS
CAML, NUCLEIC ACIDS ENCODING THE SAME AND METHODS OF USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 1340-1-007 PCT
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: David A. Jackson, Esq.
STREET: 411 Hackensack Ave, Continental Plaza,
                                                                                                                                                                                                                                                                                                                      FRAGMENT TYPE: N-terminal ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                              SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear MOLECULE TYPE: peptid
                                                                                                                                                                                                                                                                                                                                                             HYPOTHETICAL: NO
                                                                                                                 CSONEYFDSLLHACIPCQLRCSSNTPPLTCQRYC----C----EYFDSLLHACPCLRCS 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CSQNEYFDSLLHACIPCQLRCSSNTPPLTCQRYC----C----EYFDSLLHACPCLRCS 51
                                       -----PPTCQYCC 59
                                                                                                                                                      th 18.7%; Score 93; DB 4; Length 166; Similarity 28.4%; Pred. No. 0.033; 21; Conservative .13; Mismatches 22; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 166 amino acids
TYPE: amino acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE: New Jersey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Hackensack
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/09290333
                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: 201-487-5800
TELEFAX: 201-343-1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                                                                peptide
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3; Mismatches
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US-09-290-333-2
; Sequence 2, Application US/09290333
; Patent No. 6316222
; GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPOTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
REFERENCE/DOCKET NUMBER: 1344
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-487-5800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
LENGTH: 293 amino acids
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APPLICANT: VON BULOW, GOTZ
TITLE OF INVENTION: A LYMPHOCYTE SURFACE RECEPTOR THAT BINDS
TITLE OF INVENTION: CAML, NUCLEIC ACIDS ENCODING THE SAME AND METHODS OF USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
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                                                                                                                                                                                                             91 SICGQHPKQCAYFC
                                                                                                                                                                                                                                              52
                                                                                                                                                                                                                                                                                   34 CPEEQYWDPLLGTCMSCKTICNHQS-QRTCAAFCRSLSCRKEQGKFYDHLLR--DCISCA 90
                                                                                                                                                                                                                                                                                                                                                                              Local
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STRANDEDNESS: single
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APPLICANT: Bram, Richard J.

TITLE OF INVENTION: A LYMPHOCYTE SURFACE RECEPTOR THAT BINDS CAML, NUCLEIC ACIDS ENCODING THE SAME AND
                                                                                                                                                                                                                                              -----PPTCQYCC
                                                                                                                                                                                                                                                                                                                                                         h 18.7%; Score 93; DB 2; Le Similarity 28.4%; Pred. No. 0.057; 21; Conservative 13; Mismatches 22;
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1: USA
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Best Local S
                           TITLE OF INVENTION: Deubiquitinating Enzymes That Regulate TITLE OF INVENTION: Cell Growth FILE REFERENCE: DEGI-435p2A2
CURRENT APPLICATION NUMBER: US/09/019,095A
CURRENT FILING DATE: 1998-02-05
PRIOR APPLICATION NUMBER: PCT/US96/12884
PRIOR FILING DATE: 1996-08-07
PRIOR APPLICATION NUMBER: US 60/002,066
PRIOR APPLICATION NUMBER: US 60/019,787
PRIOR APPLICATION NUMBER: US 60/019,787
PRIOR APPLICATION NUMBER: US 60/019,787
PRIOR FILING DATE: 1996-06-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: D'Andred, Alan D. APPLICANT: Zhu, Yuan
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TELEPAX: 201-343-1684
INFORMATION FOR SED ID NO: 2:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            91
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NAME: Jackson Esq., David A.
REGISTRATION NUMBER: 26,742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
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ZIP: 077601
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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SEQ ID NOS
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COMMUNICATION INFORMATION:
TELEPHONE: 201-487-5800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
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FILING DATE: 12-Apr-1999
CLASSIFICATION: <Unknown>
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RCE:
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IPTION: SEQ ID NO:
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28.4%;
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US-09-019-095A-2
: Sequence 2, Application US/09019095A
: Patent No. 6287858
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                             FILE REFERENCE: DFCI-435p2A2
CURRENT APPLICATION NUMBER: US/09/019,095A
CURRENT FILING DATE: 1998-02-05
PRIOR APPLICATION NUMBER: PCT/US96/12884
PRIOR FILING DATE: 1996-08-07
PRIOR APPLICATION NUMBER: US 60/002,066
PRIOR APPLICATION NUMBER: US 60/019,787
PRIOR APPLICATION NUMBER: US 60/019,787
PRIOR FILING DATE: 1995-08-01
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SEQ ID NO 22
LENGTH: 521
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PRIOR FILING DATE: 1996-08
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1995-08
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE: 1996-06
RUMBER OF SEQ ID NOS: 51
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Best Local Similarity
Matches 19; Conserv
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Best Local Similarity
Matches 19; Conserv
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                                                                                                                                                                                           APPLICANT: Zhu, Yuan
TITLE OF INVENTION: Deub
TITLE OF INVENTION: Cell
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APPLICANT: Zhu, Yuan
TITLE OF INVENTION: Deublqui
TITLE OF INVENTION: Cell Gro
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                  NUMBER OF SEQ ID NOS:
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ORGANISM: Murine
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                                                                                                                                                                                                                                                                                                                                                                                              61 LQCLTHTPPL-----ADYMLSQEHSQTC--CSPEGCKLCAMEALVTQSLLHS 105
                                                                                                                                                                                                                                                                                                                                                                                                                   19 LRCSSNTPPLTCQRYCCEYFDSLLHACPCLRCSPPTCQYCCFHSEYFDSLLHA 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             55 LOCLTHTPPL-----ADYMLSQEHSQTC--CSPEGCKLCAMEALVTQSLLHS 99
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FastSEQ for Windows Version 3.0
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JMBER: US 60/019,787
                                                                                                                                                                                                                Deubiquitinating Enzymes
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35.8%;
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Pred. No. 1;
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; SEQ ID NO 2
; LENCTH: 526
; TYPE: PRT
; ORGANISM: Murine
US-09-019-095A-2
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US-08-460-309-5
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                                  Query Match
Best Local Similarity
Matches 29; Conserv
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 22-SEP-19
APPLICATION NUMBER: US
FILING DATE: 21-SEP-19
                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: P-LA 9721
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                 ATTORNEY AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
                                                                                                                                                                                                                                                                                                                                       FILING DATE: 30-JAN-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0:
FILING DATE: 27-JUL-1992
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CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Engvall, Eva
APPLICANT: Leivo, Imp.
TITLE OF INVENTION: Nucleic Acids Encoding Merosin, Merosin
TITLE OF INVENTION: Fragments and Uses Thereof
NUMBER OF SEQUENCES: 23
                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                      TYPE: amino acid
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STATE: California
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les 19; Conser
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US/08/460,309
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1 CSQNEYFDSLL--HACIPCQ--
                                                                                                                                                                  ENGTH:
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                                    Conservative
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30-JAN-1990
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23.48;
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                                    10;
                                  Score 80; DB Pred. No. 9; LO; Mismatches
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US-08-125-077-5
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Patent No. 5872231 5840863
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: US PCT
FILING DATE: 21-SEP-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/
FILING DATE: 30-JAN-1990
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 3075 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US 07/919,951
FILING DATE: 27-UUT.1992
ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
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APPLICANT: Leivo, Ilmo
TITLE OF INVENTION: Nucleic Acids Encoding Merosin, Merosin
TITLE OF INVENTION: Fragments and Uses Thereof
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                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION:
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                                                      831 CADGYYGNPTVPGESCVPCDCSGNVDPSEAGHCDSVTGECLKCLGNTDGAHCER-CADGF 889
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37 YFDSL----LHACPC-------------LRCSP-PTCQYC--CFHSEYFDSLLHACP 73
                                                                                                                                                                                                                                                       TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                Local
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                                                                                                                                                                                                                                                                                                                                                                                                     REGISTRATION NUMBER:
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                                                                                         1 CSQNEYFDSLL--HACIPCQ-----
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29; Conserv
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4370 La Jolla Village Drive, Suite 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
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                                                                                                                             Conservative
                                                                                                                                                                                                                                        linear
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                                                                                                                         16.1%; Score 80; DB 23.4%; Pred. No. 9; Live 10; Mismatches
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                                                                                         -----LRCSSNTPPLTCQRYCCE-- 36
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           APPLICANT: D'Andrea, A
APPLICANT: Zhu, Yuan
TITLE OF INVENTION: DE
TITLE OF INVENTION: CE
FILE REFERENCE: DECI-4
                                                                                             GENERAL INFORMATION:
                                                                                                          Sequence 38, Application US/09019095A Patent No. 6287858
                                                                                                                                                                                                                                                                                                                                                                   Query Match
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REFERENCE/DOCKET NUMBER: 03
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                        2782 P--IQQCGCYHNGAYYEPEQTVLIDNCRQQCTCHAGKVVVCQEHSCKPGQVCQP 2833
                                                                                                                                                                                                                                                                         2733 CPQNSHYE---
                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION: NAME: MURPHY JR, GERALD
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TITLE OF INVENTION:
NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH:
                                                                                                                                                                                                                                         52 PPTCQYC-CFHS EYFD---SLL----
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OPERATING SYSTEM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
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                                                                                                                                                                                                                                                                                                     1 CSQNEYFDSLLHACI-PCQLRCSSNTPPLTCQRYCCEYFDSLLHACPC-----LRCS 51
APPLICATION NUMBER:
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PO BOX 747
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           N: Deubiquitinating Enzymes That Regulate DFCI-435p2A2
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                                                                            Alan D.
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US/09/019,095A
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SOFTWARE: Fas:
SEQ ID NO 38
FENGTH: 545
                                                                Matches
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Patent No.
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Matches 18; Conserv
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                                                                                            Query Match
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TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1996-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT FILING DATE:
                                                                                                                                                                                                                                            NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: murine
                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: EP 94
FILING DATE: 16-SEP-1994
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE: 12-SEP-PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
ADDRESSEE: Akzo No. 5885568el N.V
STREET: 1300 PICCARD DRIVE #206
                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
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CTTY: Rockville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION:
                              10 LLHACIPCQLRCSSNTPPLTCQRYCCEYFDSLLHACPCLRCSPPTC---QYCCFHSEYFD 66
                                                                                                                                                                             TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: USA
ZIP: 20850-4373
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                                                                                                                                                                                                                                                             REGISTRATION NUMBER:
                                                                                                                                                                                                            LENGTH:
 6 LTNAC--CCLRYTNS----CCSKYCCS-----
                                                                               Similarity
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DUNN, Patrick Paul James P.
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                                                                Conservative
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34.0%;
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26.7%;
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iona Margaret F.
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                                                              7; Mismatches
                                                                             Score 78; Pred. No.
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-KCCCSKCCCSKCCCSTYCC-----
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                                                                                           Length 109;
                                                              Indels
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                                                                                                                                      Sequence 20, Application US/08965903B Patent No. 6060275 GENERAL INFORMATION:
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Best Local S
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Patent No.
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PRIOR APPLICATION NUMBER: 08/527.
APPLICATION NUMBER: 08/527.
FILING DATE: 12-SEP-1995
ATTORNEY/AGENT INFORMATION:
NAME: GORMLEY, MARY E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS:
                                   NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                    APPLICANT: Hacohen, Nir
APPLICANT: Krasnow, Mark
TITLE OF INVENTION: SPRO
TITLE OF INVENTION: SEQU
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ADDRESSEE: Akzo No. 6001363el N.V
STREET: 1300 PICCARD DRIVE #206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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APPLICANT: TOMLEY, Fiona Margaret F.
APPLICANT: DUNN, Patrick Paul James P.
APPLICANT: VERMEULEN, Arnoldus Nicolaus A.N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FITLE OF INVENTION: Coccidiosis poultry vaccine NUMBER OF SEQUENCES: 2
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                                                                                                                                                                                                                                                                                                                                                                 10 LLHACIPCOLRCSSNTPPLTCORYCCEYFDSLLHACPCLRCSPPTC---QYCCFHSEYFD 66
                                                                                                                                                                                                                                                                  46 -STFCCSKCCCSKFC 59
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                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
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OPERATING SYSTEM: PC-DOS/MS-DOS
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                     DDRESSEE:
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E: Dehlinger & Associates
350 Cambridge Ave., Suite
                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                       15.7%;
26.7%;
                                                                                    Mark A.
SPROUTY PROTEIN AND CODING
                                                                       SEQUENCE
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   250
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US-08-227-536-2
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APPLICANT: Eckner, Richard

APPLICANT: Ewen, Mark

APPLICANT: Livingston, David

TITLE OF INVENTION: NUCLEIC ACI

TITLE OF INVENTION: FACTOR P300
                                                                                                                                                                                                                                                                                                                                             Patent No.
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                                                                                                                                                                                                                                                                                                                                                          Sequence 2,
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FILING DATE: 07-NUV-11/.
CLASSIFICATION: 435
PRIOR APPLICATION DATA: 05 60//
APPLICATION NUMBER: US 60//
APPLICATION NUMBER: 07-11/2019 60//
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 139 anino acids
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGINAL SOURCE:
INDIVIDUAL ISC
                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: FRAGMENT TYPE:
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-324-0880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 07-NOV-1996
ATTORNEY/AGENT INFORMATION:
NAME: Petithory, Joanne
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: FastSEQ for Windows Version 2.0 CURRENT APPLICATION DATA:
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                                                                                                          COUNTRY:
                                                                                                                              STATE:
                                                                                                                                             STREET: Ten I
CITY: Boston
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STRANDEDNESS: sir
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE:
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                                                                                             02109
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5658784
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internal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   single
                                                                                                                                                                                                                                     FACTOR P300 AND USES
                                                                                                                                                                                                                                                       NUCLEIC ACID, ENCODING TRANSCRIPTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      42,995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US 60/030232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/08/965,903B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 77.5; DB Pred. No. 0.81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8600-0177.30
                                                                                                                                                                                 Gagnebin & Hayes
   Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 3;
                                                                                                                                                                                                                                      엵
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 139;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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54

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CURRENT APPLICATION NOMBER: US/08/227,536
FILING DATE: 14-APR-1994
CLASSIFICATION 436
ATTORNEY/AGENT IMPORMATIOM: NAME: Williams Ph.D. Kathleen A. REGISTRATION WIMBER: 34,380
REFERENCE/DOCKET NUMBER: DFCI-308XX
TELECOMMUNICATION INFORMATION:
TELEPHAN: (617) 451-2390
TELEPHAN: (617) 451-0313
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 2414 dnino acids
TYPE: dmino acids
TYPE: dmino acids
TYPE: amino acids
TYPE: dmino acids
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Search completed: May 15, 2002, 09:50:03 Job time: 103 sec
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                                                                                                                                                                                                                                                                                             В
                                                                                                                 DЪ
                                                                                                                                                                                                                                                                                                                                                                               Query Match 15.4%; Score 76.5; I Best Local Similarity 21.7%; Pred. No. 15; Matches 30; Conservative 15; Mismatches
                                                                                                     1738 CIQ---SLVHACQCRNANCSLPSCQKMKRVVQHTKGCKRKTNGGCPICKQLIALCCYHAK 1794
                                                                                                                                                                                                                                                                                      1683 CTVCEDYD----LCITCYNTKNHDHKMEKLGLGLDDESNNQQAAATQSPGDSRRLSTQR- 1737
                                                                                                                                                                                                                                         1 CSQNEYEDSLLHACIPC-----QLECSSNTP----PLTCQRY 33
                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 2414;
                                                                                                                                                                                                                                                                                                                                                                             22; Indels 71; Gaps
                                                                                                                                                                                                                                                                                                                                                                                  9;
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